

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Amanda Walker Examiner #: 15663 Date: 6/30/04
 Art Unit: 1152 Phone Number 30 272-1231 Serial Number: 101721164
 Mail Box and Bldg/Room Location: Room 9D01 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Bob Sheet Attached

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for a compd of formula 1.

Also for a compd of formula 2. Claims are attached & Thank you.
 May limit accordingly if needed.

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>K. Fuller</u>	NA Sequence (#) _____	STN <u>1</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>2</u>	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>7/12/04</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>30</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>56</u>	Other _____	Other (specify) _____



STIC Search Report

EIC 1700

STIC Database Tracking Number: 126491

TO: Amanda Walke

Location: REM 9D64

Art Unit : 1752

July 12, 2004

**5E88
Case Serial Number: 10/721`164**

From: Kathleen Fuller

Location: EIC 1700

REMSSEN 4B28

Phone: 571/272-2505

Kathleen.Fuller@uspto.gov

Search Notes



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28



=> FILE REG

FILE 'REGISTRY' ENTERED AT 10:08:34 ON 12 JUL 2004
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STRUCTURE FILE UPDATES: 11 JUL 2004 HIGHEST RN 708207-86-7
DICTIONARY FILE UPDATES: 11 JUL 2004 HIGHEST RN 708207-86-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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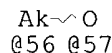
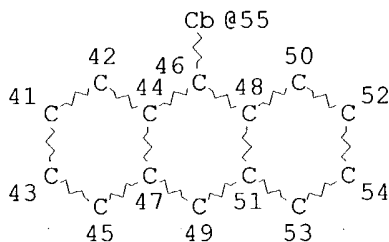
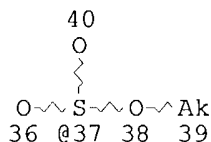
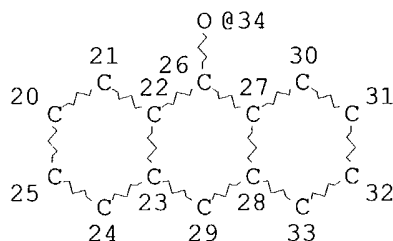
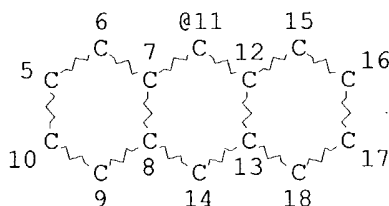
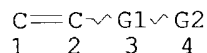
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FILE COVERS 1907 - 12 Jul 2004 VOL 141 ISS 3
FILE LAST UPDATED: 11 Jul 2004 (20040711/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE

L10 SCR 2043
L12 STR



query covers formula 1 or 2

367 polymers

VAR G1=AK/CB/56-2 57-4
VAR G2=11/34/37/55
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 55

STEREO ATTRIBUTES: NONE

L15	367	SEA FILE=REGISTRY	SSS FUL	L12 AND L10
L19	103410	SEA FILE=REGISTRY	ABB=ON	2508.17/RID
L20	132	SEA FILE=REGISTRY	ABB=ON	L15 AND L19
L21	236	SEA FILE=REGISTRY	ABB=ON	L15 AND 1-3/S
L22	4	SEA FILE=REGISTRY	ABB=ON	L20 AND L21
L23	233	SEA FILE=REGISTRY	ABB=ON	L15 AND SULFON?
L27	2	SEA FILE=REGISTRY	ABB=ON	L20 AND L23
L28	4	SEA FILE=REGISTRY	ABB=ON	L22 OR L27
L29	6	SEA FILE=HCAPLUS	ABB=ON	L28
L30	0	SEA FILE=HCAPLUS	ABB=ON	L29 AND UNDERCOAT?
L31	0	SEA FILE=HCAPLUS	ABB=ON	L29 AND COAT?/SC, SX, AB, BI
L43	0	SEA FILE=HCAPLUS	ABB=ON	L30 OR L31

4 structures with both formulas

=> S L29 AND REPROGRA?/SC, SX
280959 REPROGRA?/SC
82596 REPROGRA?/SX
L44 1 L29 AND REPROGRA?/SC, SX

=> D L44 BIB ABS HITIND HITSTR

L44 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:590965 HCAPLUS
DN 121:190965

TI Quenching Kinetics of Anthracene Covalently Bound to a Polyelectrolyte. 1.

1 CA reference

Effects of Ionic Strength

AU Morrison, M. E.; Dorfman, R. C.; Clendening, W. D.; Kiserow, D. J.;
 Rossky, P. J.; Webber, S. E.
 CS Department of Chemistry and Biochemistry, University of Texas, Austin, TX,
 78712-1167, USA
 SO Journal of Physical Chemistry (1994), 98(21), 5534-40
 CODEN: JPCHAX; ISSN: 0022-3654

DT Journal

LA English

AB CcSteady-state and time-resolved fluorescence quenching expts. have been performed for the following polyelectrolytes: (1) 9-ethanol anthracene (9EA) covalently bound to poly(methacrylic acid) (PMA) in pH 11 water and (2) vinylidiphenylanthracene (DPA) bound to poly(styrene sulfonate) (PSS) in neutral water, where in each case the chromophores comprise less than 1 mol % of the polymer. The quencher used was Tl⁺ (from TlNO₃) with addnl. ionic strength provided by KNO₃. Quenching expts. were performed as a function of quencher concentration and ionic strength. The quencher concentration

ranged from 0 to 3 mM, and the ionic strength ranged from 2 to 100 mM. At each ionic strength Stern-Volmer plots for the steady-state and time-resolved data agree, which implies that quenching is almost entirely diffusive. At low ionic strengths, the rates of fluorescence quenching in these polyelectrolyte solns. exceed the diffusion-controlled rate expected for homogeneously distributed reactants by approx. 2 orders of magnitude. A dramatic reduction in the reaction rate is observed for only slight increases in the ionic strength, and at high salt concns. the rate asymptotically approaches this diffusion-controlled limit. The Stern-Volmer plots exhibit neg. curvature corresponding to that observed if a fraction of the fluorophores are inaccessible to quenchers. This inaccessibility is interpreted in the context of a diffusion/reaction theory. A simple model for the quenching dynamics using a Smoluchowski diffusion equation and a Poisson-Boltzmann potential of mean force for a rod-like polymer is briefly discussed and shown to account for many, but not all, aspects of the observations.

CC 74-1 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

Section cross-reference(s): 73

IT 101979-37-7 154608-20-5

RL: USES (Uses)

(fluorescence quenching of, by thallium ion, effect of quencher concentration

and ionic strength on kinetics of)

IT 101979-37-7

RL: USES (Uses)

(fluorescence quenching of, by thallium ion, effect of quencher concentration

and ionic strength on kinetics of)

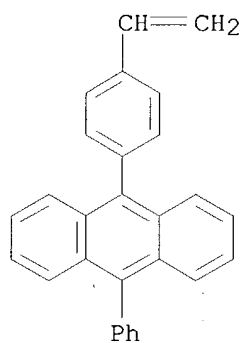
RN 101979-37-7 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, polymer with
 9-(4-ethenylphenyl)-10-phenylanthracene (9CI) (CA INDEX NAME)

CM 1

CRN 6671-65-4

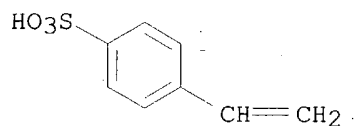
CMF C28 H20



CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na



● Na

=> D QUE L38

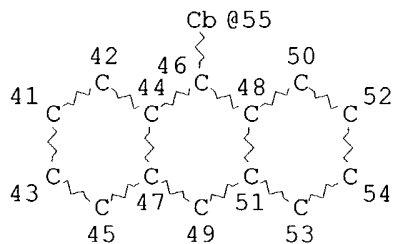
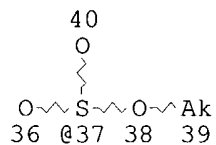
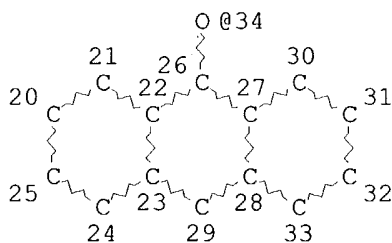
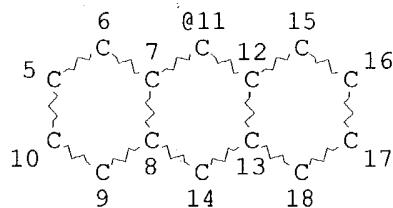
L10

L12

SCR 2043

STR

C=C~G1~G2
1 2 3 4



Ak~O
@56 @57

*formula I
with
utility*

VAR G1=AK/CB/56-2 57-4
 VAR G2=11/34/37/55
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 55

STEREO ATTRIBUTES: NONE

L15 367 SEA FILE=REGISTRY SSS FUL L12 AND L10
 L23 233 SEA FILE=REGISTRY ABB=ON L15 AND SULFON?
 L32 207 SEA FILE=HCAPLUS ABB=ON L23
 L35 5 SEA FILE=HCAPLUS ABB=ON L32 AND UNDERCOAT?
 L36 37 SEA FILE=HCAPLUS ABB=ON L32 AND COAT?/SC, SX, AB, BI
 L37 27 SEA FILE=HCAPLUS ABB=ON L36 AND REPROGR?/SC, SX
 L38 31 SEA FILE=HCAPLUS ABB=ON L35 OR L37

=> D L38 ALL 1-31 HITSTR

L38 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:512663 HCAPLUS
 ED Entered STN: 25 Jun 2004
 TI **Undercoat** later materials for multi-layer photoresist for
 lithography and method for fabricating electric circuit using the same
 IN Nakamura, Etsuko; Wakiya, Kazumasa
 PA Tokyo Ohka Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 20 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-11
 ICS G03F007-26; H01L021-027; H01L021-3213
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 37, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004177668	A2	20040624	JP 2002-343870	20021127
PRAI	JP 2002-343870		20021127		

AB The title material contains a resin and a solvent, wherein the resin has a group, which generates sulfonic acid residual group after applied with energy such as light. The **undercoat** material provides **undercoat** layers, which show high resistance towards a developer solution and are easily removed with a photoresist remover.

ST **undercoat** later lithog elec circuit

IT INDEXING IN PROGRESS

IT Electric circuits

Photolithography

(**undercoat** later materials for two-layer photoresist for lithog. and method for fabricating elec. circuit using the same)

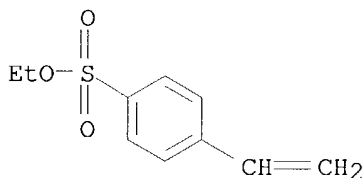
IT 29192-51-6, Ethyl 1-vinylbenzene-4-sulfonate polymer

RL: TEM (Technical or engineered material use); USES (Uses)

(resin in **undercoat** later materials for lithog.)

IT INDEXING IN PROGRESS

IT 29192-51-6, Ethyl 1-vinylbenzene-4-sulfonate polymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (resin in **undercoat** later materials for lithog.)
 RN 29192-51-6 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, ethyl ester, homopolymer (9CI) (CA
 INDEX NAME)
 CM 1
 CRN 16736-98-4
 CMF C10 H12 O3 S



L38 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:508013 HCAPLUS
 ED Entered STN: 24 Jun 2004
 TI **Undercoat** later materials for two-layer photoresist for
 lithography and method for fabricating electric circuit using the same
 IN Nakamura, Etsuko; Wakiya, Kazumasa
 PA Tokyo Ohka Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-11
 ICS G03F007-075; G03F007-26; G03F007-42; H01L021-027; H01L021-3213
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 37, 76

applicant

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004177667	A2	20040624	JP 2002-343869	20021127
PRAI	JP 2002-343869		20021127		

AB The title material contains a resin and a solvent, wherein the resin has a group, which generates sulfonic acid residual group after applied with energy such as light-irradiation The **undercoat** material provides **undercoat** layers, which well absorb exposure light and show high resistance towards a developer solution and are easily removed with a photoresist remover.

ST **undercoat** later lithog elec circuit

IT INDEXING IN PROGRESS

IT Polysiloxanes

RL: TEM (Technical or engineered material use); USES (Uses)
 (photoresist; photoresist for lithog.)

IT Electric circuits

Photolithography

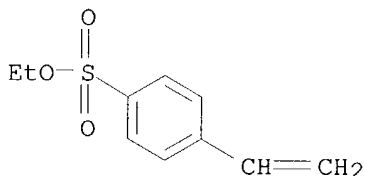
Photoresists

(**undercoat** later materials for two-layer photoresist for

lithog. and method for fabricating elec. circuit using the same)
 IT 29192-51-6, Ethyl 1-vinylbenzene-4-sulfonate polymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (resin in **undercoat** later materials for lithog.)
 IT INDEXING IN PROGRESS
 IT 29192-51-6, Ethyl 1-vinylbenzene-4-sulfonate polymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (resin in **undercoat** later materials for lithog.)
 RN 29192-51-6 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, ethyl ester, homopolymer (9CI) (CA
 INDEX NAME)

CM 1

CRN 16736-98-4
 CMF C10 H12 O3 S



L38 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:508012 HCAPLUS
 ED Entered STN: 24 Jun 2004
 TI **Undercoat** later materials for lithography and method for
 fabricating electric circuit using the same
 IN Nakamura, Etsuko; Wakiya, Kazumasa
 PA Tokyo Ohka Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-11
 ICS C08F012-02; H01L021-027; H01L021-3205
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 37, 76

applicant

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004177666	A2	20040624	JP 2002-343867	20021127
PRAI	JP 2002-343867		20021127		

AB The title material contains a resin and a solvent, wherein the resin has a group, which generates sulfonic acid residual group after applied with energy such as light-irradiation The **undercoat** material provides **undercoat** layers, which well absorbs exposure light and shows high resistance towards a developer solution and easy removal with a photoresist remover.

ST **undercoat** later lithog elec circuit
 IT INDEXING IN PROGRESS
 IT Electric circuits
 Photolithography

Photoresists

(**undercoat** later materials for lithog. and method for fabricating elec. circuit using the same)

IT **29192-51-6**, Ethyl 1-vinylbenzene-4-sulfonate polymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (resin in **undercoat** later materials for lithog.)

IT INDEXING IN PROGRESS

IT **29192-51-6**, Ethyl 1-vinylbenzene-4-sulfonate polymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (resin in **undercoat** later materials for lithog.)

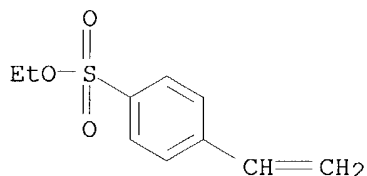
RN 29192-51-6 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 16736-98-4

CMF C10 H12 O3 S



L38 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:247015 HCAPLUS

DN 140:271419

ED Entered STN: 25 Mar 2004

TI A method of graft polymerization using supported macroinitiators and materials produced by the method

IN Kano, Takeyoshi; Kawamura, Koichi

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 131 pp.
 CODEN: EPXXDW

DT Patent

LA English

IC ICM C08F265-04

CC 35-8 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 37, 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1400544	A1	20040324	EP 2003-20552	20030917
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2004126046	A2	20040422	JP 2002-287814	20020930
	JP 2004126047	A2	20040422	JP 2002-287815	20020930
	JP 2004123837	A2	20040422	JP 2002-287821	20020930
	JP 2004175098	A2	20040624	JP 2003-122061	20030425
	JP 2004161995	A2	20040610	JP 2003-154551	20030530
	US 2004067434	A1	20040408	US 2003-662458	20030916
PRAI	JP 2002-271578	A	20020918		
	JP 2002-287814	A	20020930		

JP 2002-287815	A	20020930
JP 2002-287816	A	20020930
JP 2002-287821	A	20020930
JP 2003-93867	A	20030331
JP 2003-94690	A	20030331
JP 2003-122061	A	20030425
JP 2003-154551	A	20030530

AB A method of graft polymerization comprises the steps of (a) forming a polymerization

initiating layer in which a polymer having on a side chain a crosslinking group and a functional group having polymerization initiating capability is immobilized on a support by a crosslinking reaction, (b) contacting a compound having a polymerizable functional group with the polymerization initiating

layer, and (c) bonding the compound to the polymerization initiating layer by supplying energy. The functional group having polymerization initiating capability is selected from aromatic ketones, onium salts, organic peroxides, thio compds., hexaarylbiimidazoles, ketoxime esters, borates, azinium salts, pyridinium salts, and carbon-halogen bond-containing compds. The method provides a graft polymerization process to form a graft structure in which

all polymer chains are chemical bonded directly to a polymerization initiating layer

to prevent dissoln. of an initiator contained in the polymerization initiating layer into a monomer solution. The method can be used to graft a variety of functional monomers onto supports forming hydrophilic surfaces with superior durability. The materials having hydrophilic surfaces can be used as pos. or neg. printing plate precursors having excellent press life and capable of forming a large number of spotless images of high quality even under severe printing conditions. The method addnl. provides graft copolymers having polar groups for use as dispersing materials for metal particles and particle-adsorbing materials where functional particles are firmly adsorbed on the surface as a single layer, the adsorbed functional particle effect being preserved. Thus, [(2-acryloyloxy)ethyl](4-benzoylbenzyl)dimethylammonium bromide (8.1), 2-hydroxyethyl methacrylate (9.9) and iso-Pr methacrylate (13.5) were polymerized in propylene glycol monomethyl ether (30) in the presence of dimethyl-2,2'-azobis(2-methylpropionate) (0.43 g). A poly(ethylene terephthalate) film (M 4100) was coated with a solution containing the above polymer (0.4), 2,4-toluene diisocyanate (0.16) and propylene glycol monomethyl ether (1.6) g, and the top layer was crosslinked at 110° for 10 min. The PET support with the crosslinked polymerization initiating top layer was

immersed

into a 2-ethylethoxy acrylate solution (10%) and UV irradiated for 30 min to produce a graft copolymer.

ST supported crosslinked macroinitiator hydrophilic monomer graft polymn; image forming layer graft polymn hydrophilic surface printing plate; metal particle absorbed dispersed polar group graft copolymer film

IT Polyurethanes, preparation

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(acrylic, crosslinked; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Polyurethanes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic, graft; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Particles

(adsorbed on graft copolymers having polar groups; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Polymerization
Polymerization catalysts
(graft; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Adsorbents
Crosslinking
Crosslinking agents
Dispersing agents
Printing plates
(method of graft polymerization using supported macroinitiators and materials produced by method)

IT Plastic films
(of graft copolymers having polar groups, metal particles dispersed in; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Metals, uses
RL: NUU (Other use, unclassified); USES (Uses)
(particles dispersed in graft copolymers having polar groups; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(support; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Functional groups
(supported macroinitiators containing; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Polymerization catalysts
(supports; method of graft polymerization using supported macroinitiators and materials produced by method)

IT Materials processing
(templates; method of graft polymerization using supported macroinitiators and materials produced by method)

IT 672959-25-0P 672959-29-4P 672959-32-9P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(crosslinked; method of graft polymerization using supported macroinitiators and materials produced by method)

IT 672959-41-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinked; method of graft polymerization using supported macroinitiators and materials produced by method)

IT 106-91-2DP, Glycidyl methacrylate, reaction products with polyacrylamide and mercaptopropionic acid 107-96-0DP, 3-Mercaptopropionic acid, reaction products with polyacrylamide and glycidyl methacrylate 9003-01-4DP, Poly(acrylic acid), reaction products with methacryloyloxyethyl isocyanate, neutralized 9003-05-8DP, Polyacrylamide, reaction products with mercaptopropionic acid and glycidyl methacrylate 30674-80-7DP, 2-Methacryloyloxyethyl isocyanate, reaction products with polyacrylic acid, neutralized 672959-24-9P 672959-28-3P 672959-31-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(method of graft polymerization using supported macroinitiators and materials

produced by method)

IT 6066-82-6DP, N-Hydroxysuccinimide, reaction products with acrylic acid-containing graft copolymers and nitrobenzylphenol and carbodiimides 25952-53-8DP, N-Ethyl-N'-(3-dimethylaminopropyl)carbodiimide hydrochloride, reaction products with acrylic acid-containing graft copolymers and nitrobenzylphenol and hydroxysuccinimide 37021-63-9DP, reaction products with acrylic acid-containing graft copolymers and hydroxysuccinimide and carbodiimides 672959-26-1P 672959-27-2DP, reaction products with hydroxysuccinimide and nitrobenzylphenol and carbodiimides 672959-27-2P 672959-30-7P 672959-33-0P 672959-34-1P 672959-35-2P 672959-36-3P 672959-37-4P **672959-38-5P** 672959-39-6P 672959-40-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(method of graft polymerization using supported macroinitiators and materials

produced by method)

IT 25038-59-9, M 4100, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(support; method of graft polymerization using supported macroinitiators and materials produced by method)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ebato, H; US 5889073 A 1999 HCAPLUS
- (2) Fuji Photo Film Co Ltd; EP 1172696 A 2002 HCAPLUS
- (3) Fuji Photo Film Co Ltd; EP 1211096 A 2002 HCAPLUS
- (4) Fuji Photo Film Co Ltd; EP 1302504 A 2003 HCAPLUS

IT **672959-38-5P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(method of graft polymerization using supported macroinitiators and materials

produced by method)

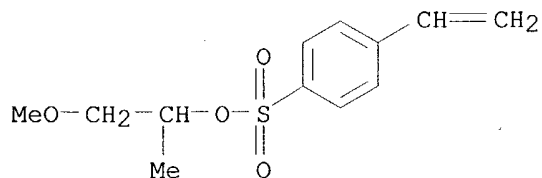
RN 672959-38-5 HCAPLUS

CN Benzenemethanaminium, 4-benzoyl-N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, bromide, polymer with 2,4-diisocyanato-1-methylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, 2-methoxy-1-methylethyl 4-ethenylbenzenesulfonate and 1-methylethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

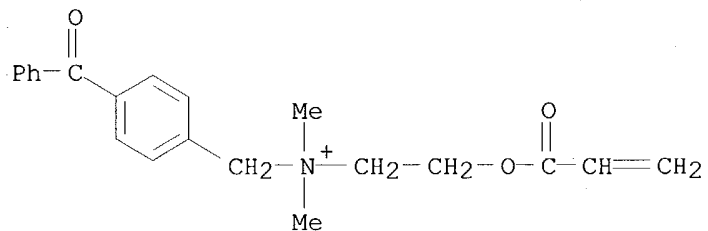
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CMF C12 H16 O4 S



CM 2

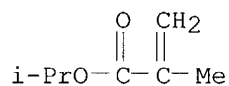
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● Br⁻

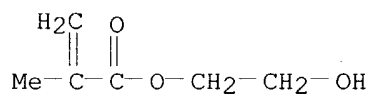
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CRN 4655-34-9
CMF C7 H12 O2



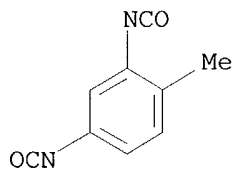
CM 4

CRN 868-77-9
CMF C6 H10 O3



CM 5

CRN 584-84-9
CMF C9 H6 N2 O2



L38 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:143277 HCAPLUS
 DN 138:178275
 ED Entered STN: 26 Feb 2003
 TI Heat-sensitive lithographic plate with backcoat layer containing metal
 oxide particles
 IN Inno, Norifumi
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 33 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41N001-14
 ICS G03F007-00; G03F007-004; G03F007-11
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)

FAN.CNT 1

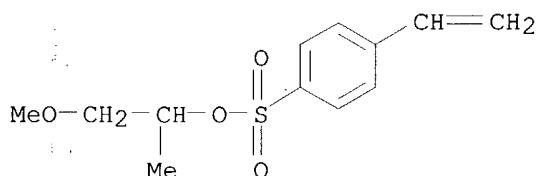
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003054146	A2	20030226	JP 2001-249377	20010820
PRAI	JP 2001-249377		20010820		
AB	The plate comprises a plastic support successively coated with (A) a hydrophilic layer, (B) a heat-sensitive layer containing a polymer with a functional group generating sulfonic acid on heating on one side, and (C) a backcoat layer containing metal oxide particles on the other side. Adhesion of the heat-sensitive layer to the backside of the support is prevented when the plates are laminated.				
ST	heat sensitive lithog plate; backcoat layer metal oxide particle lithog plate; sulfonic acid generator polymer lithog plate				
IT	Aminoplasts RL: TEM (Technical or engineered material use); USES (Uses) (acrylic; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)				
IT	Polyesters, uses Polyurethanes, uses RL: TEM (Technical or engineered material use); USES (Uses) (aminoplast-; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)				
IT	Lithographic plates (heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)				
IT	Aminoplasts RL: TEM (Technical or engineered material use); USES (Uses) (polyester-; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)				
IT	Aminoplasts RL: TEM (Technical or engineered material use); USES (Uses) (polyurethane-; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)				
IT	Polyesters, uses RL: TEM (Technical or engineered material use); USES (Uses) (support; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)				
IT	177591-75-2P, Jurymer ET 410-Sumitex M3 copolymer RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (backcoat layer; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)				

- IT **215958-19-3**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (heat-sensitive layer; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)
- IT 1304-28-5, Barium oxide, uses 1309-48-4, Magnesium oxide, uses 1312-43-2, Indium oxide 1313-27-5, Molybdenum oxide, uses 1314-13-2, Zinc oxide, uses 1314-62-1, Vanadia, uses 1332-29-2, Tin oxide 1344-28-1, Alumina, uses 7631-86-9, Silica, uses 12673-86-8, Antimony tin oxide 13463-67-7, Titania, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)
- IT 25749-98-8, Chemipearl S 120
 RL: TEM (Technical or engineered material use); USES (Uses)
 (overcoat layer on backside; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)
- IT 25038-59-9, Poly(ethylene terephthalate), uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (support; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)
- IT **215958-19-3**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (heat-sensitive layer; heat-sensitive lithog. plate with backcoat layer containing metal oxide particles)
- RN 215958-19-3 HCAPLUS
- CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

CMF C12 H16 O4 S



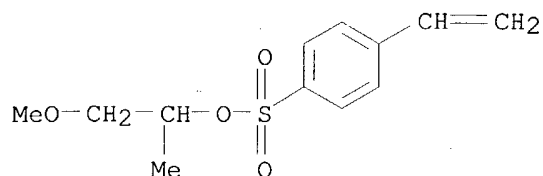
- L38 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2003:68411 HCAPLUS
- DN 138:115110
- ED Entered STN: 29 Jan 2003
- TI Lithography printing plate with intermediate layer containing metal oxide
- IN Inno, Norifumi
- PA Fuji Photo Film Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 38 pp.
 CODEN: JKXXAF
- DT Patent
- LA Japanese
- IC ICM B41N001-14
 ICS G03F007-00; G03F007-004; G03F007-033; G03F007-11
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003025751	A2	20030129	JP 2001-220053	20010719
PRAI	JP 2001-220053		20010719		
AB	The plate comprises a plastic support coated with (A) an intermediate layer containing metal oxide particles, (B) a hydrophilic layer, and (C) a heat-sensitive layer containing a polymer having a group generating sulfonic acid on heating. The plate shows good printing durability and gives clear images without stain.				
ST	lithog plate metal oxide intermediate layer; sulfonic acid polymer lithog plate; plastic support lithog plate hydrophilic layer				
IT	Lithographic plates (lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer containing sulfonic acid-generating polymer)				
IT	Polyesters, uses RL: TEM (Technical or engineered material use); USES (Uses) (support; lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer containing sulfonic acid-generating polymer)				
IT	9002-89-5, PVA 117 11099-06-2, Tetraethoxysilane homopolymer RL: TEM (Technical or engineered material use); USES (Uses) (hydrophilic layer; lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer)				
IT	1304-28-5, Barium oxide, uses 1309-48-4, Magnesium oxide, uses 1312-43-2, Indium oxide 1313-27-5, Molybdenum oxide, uses 1314-13-2, Zinc oxide, uses 1314-62-1, Vanadium oxide, uses 1344-28-1, Alumina, uses 7631-86-9, Silica, uses 13463-67-7, Titanium oxide, uses 18282-10-5, Tin oxide (SnO2) RL: TEM (Technical or engineered material use); USES (Uses) (intermediate layer containing; lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer)				
IT	12673-86-8, Antimony tin oxide 37275-76-6, Aluminum zinc oxide 39409-74-0, Niobium tin oxide 50926-11-9, Indium tin oxide RL: TEM (Technical or engineered material use); USES (Uses) (lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer)				
IT	215958-19-3 RL: TEM (Technical or engineered material use); USES (Uses) (lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer containing sulfonic acid-generating polymer)				
IT	25038-59-9, Poly(ethylene terephthalate), uses RL: TEM (Technical or engineered material use); USES (Uses) (support; lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer containing sulfonic acid-generating polymer)				
IT	215958-19-3 RL: TEM (Technical or engineered material use); USES (Uses) (lithog. plate comprising plastic support, intermediate layer, hydrophilic layer, and heat-sensitive layer containing sulfonic acid-generating polymer)				
RN	215958-19-3 HCAPLUS				
CN	Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)				

CM 1

CRN 215957-92-9
CMF C12 H16 O4 S



L38 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:4965 HCAPLUS
DN 138:63950
ED Entered STN: 03 Jan 2003
TI Image forming material, color filter master plate, and color filter
IN Kawamura, Koichi; Yamasaki, Sumiaki; Suzuki, Nobuo
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 30 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G03F007-038
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
Section cross-reference(s): 35, 38

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1271243	A2	20030102	EP 2002-13498	20020617
	EP 1271243	A3	20031015		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2002370458	A2	20021224	JP 2001-184577	20010619
	JP 2003004931	A2	20030108	JP 2001-187244	20010620
PRAI	JP 2001-184577	A	20010619		
	JP 2001-187244	A	20010620		

AB The present invention provides an image recording material with an image recording layer including a polymer compound which contains a functional group with a hydrophilic/hydrophobic character being changeable by heat, acid, or irradiation and which is directly chemical bonded to the substrate.

The image recording layer is heated, treated with acid, or irradiated to change the hydrophilic/hydrophobic character of a surface of the image recording layer and organic or inorg. mols. for forming a visible image are adsorbed at regions where the hydrophilic/hydrophobic character has been changed.

ST liq crystal display image material color filter master plate

IT Optical filters

(image forming material, color filter master plate and)

IT Liquid crystal displays

(image forming material, color filter master plate, and color filter for)

IT Epoxy resins, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

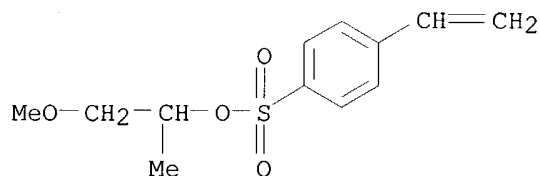
(intermediate **coating**; image forming material, color filter

- master plate containing)
- IT Polycarbonates, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(intermediate **coating**; image forming material, color filter master plate containing)
- IT Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate; image forming material, color filter master plate containing)
- IT 479255-97-5D, reaction product with polyethylene
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(A-EE; image forming material, color filter master plate containing)
- IT 9003-01-4DP, Poly(acrylic acid), reaction product with methacryloyloxyethyl isocyanate, sodium hydroxide, cross-linked
RL: POF (Polymer in formulation); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(image forming material, color filter master plate containing)
- IT 265316-78-7D, graft with epoxy resin **324745-10-0**
324745-10-0D, reaction product with polyethylene terephthalate
479255-96-4D, reaction product with polyethylene
479255-98-6
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(image forming material, color filter master plate containing)
- IT 25038-59-9, Polyethylene terephthalate, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate; image forming material, color filter master plate containing)
- IT **324745-10-0** **324745-10-0D**, reaction product with polyethylene terephthalate **479255-96-4D**, reaction product with polyethylene **479255-98-6**
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(image forming material, color filter master plate containing)
- RN 324745-10-0 HCAPLUS
- CN 1,4-Benzenedicarboxylic acid, polymer with 1,2-ethanediol and 2-methoxy-1-methylethyl 4-ethenylbenzenesulfonate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

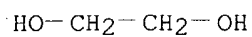
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CM 2

CRN 107-21-1

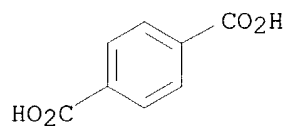
CMF C2 H6 O2



CM 3

CRN 100-21-0

CMF C8 H6 O4



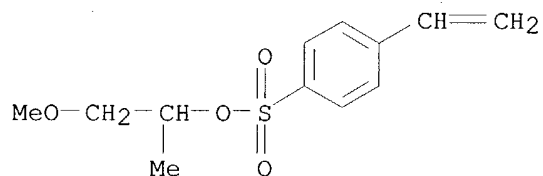
RN 324745-10-0 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 1,2-ethanediol and 2-methoxy-1-methylethyl 4-ethenylbenzenesulfonate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

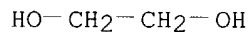
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CM 2

CRN 107-21-1

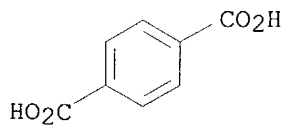
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CM 3

CRN 100-21-0

CMF C8 H6 O4



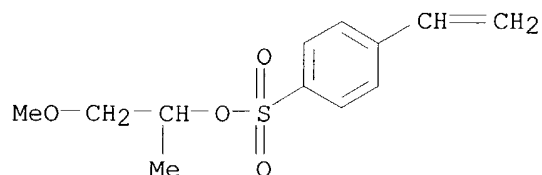
RN 479255-96-4 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, polymer with ethene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

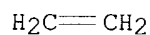
CMF C12 H16 O4 S



CM 2

CRN 74-85-1

CMF C2 H4



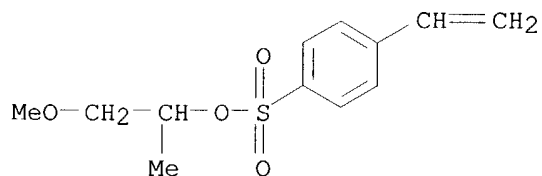
RN 479255-98-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with 2-methoxy-1-methylethyl 4-ethenylbenzenesulfonate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

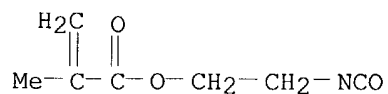
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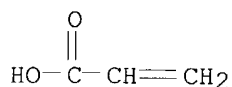
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CRN 30674-80-7

CMF C7 H9 N O3



CM 3

CRN 79-10-7
CMF C3 H4 O2

L38 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:963712 HCAPLUS
 DN 138:47359
 ED Entered STN: 20 Dec 2002
 TI Planographic printing plate precursor, substrate, and surface hydrophilic material
 IN Yamasaki, Sumiaki; Kawamura, Koichi; Makino, Naonori
 PA Fuji Photo Film Co., Ltd., Japan
 SO Eur. Pat. Appl., 67 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM B41N003-03
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
 Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1266767	A2	20021218	EP 2002-12455	20020611
	EP 1266767	A3	20030709		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2002365790	A2	20021218	JP 2001-175952	20010611
	JP 2002362054	A2	20021218	JP 2001-175953	20010611
	JP 2002361800	A2	20021218	JP 2001-175955	20010611
	JP 2003072253	A2	20030312	JP 2001-269833	20010906
	JP 2003063166	A2	20030305	JP 2002-170328	20020611
	US 2003143407	A1	20030731	US 2002-166201	20020611
PRAI	JP 2001-175952	A	20010611		
	JP 2001-175953	A	20010611		
	JP 2001-175954	A	20010611		
	JP 2001-175955	A	20010611		
	JP 2001-269833	A	20010906		
AB	A planog. printing plate precursor comprises a substrate, e.g. Al, having a hydrophilic layer which includes hydrophilic graft chains and a crosslinked structure formed through hydrolytic polycondensation of an alkoxide selected from Si, Ti, Zr and Al. A hydrophilic surface is formed by a hydrophilic polymer including a functional group that chemical bonds to the Al substrate directly or is chemical bindable to the Al substrate by a structural component having a crosslinking structure. The precursor is also enhanced by an image-forming layer and a compound that forms a hydrophobic surface region. Thus, a hydrophilic coating composition of polyacrylamide having terminal mercaptopropyltrimethoxysilane groups 0.21, tetramethoxysilane 0.62, EtOH 4.70, H2O 4.70, and nitric acid solution				

- (1N) 0.10 g was applied to Al substrate and dried at 100° for 10 min giving a surface with water contact angle 7.9°.
- ST planog printing plate precursor image layer org inorg composite
- IT **Coating materials**
 (hydrophilic **coatings**; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT Phenolic resins, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (novolak, microcapsules for image forming layer; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT Printing plates
 (planog.; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT Polyesters, miscellaneous
 RL: MSC (Miscellaneous)
 (plate substrate; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT 357418-49-6P, Allyl methacrylate-butyl methacrylate-trimethylolpropanediacylate-xylylene diisocyanate copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (crosslinked microcapsules for image forming layer; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT 444336-22-5P 457886-77-0P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (hydrophilic layer; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT 31343-95-0 444336-25-8 478364-45-3 478364-46-4 478364-47-5
 478364-48-6 478364-50-0 478364-52-2
 RL: TEM (Technical or engineered material use); USES (Uses)
 (hydrophilic layer; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Poly(acrylic acid)
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (in image forming layer; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT 96542-40-4, Acrylonitrile-2-hydroxyethyl methacrylate-p-hydroxyphenyl methacrylamide-methacrylic acid-methyl methacrylate copolymer
215958-19-3 265316-79-8
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in image forming layer; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)
- IT 444189-94-0P, Ethyl acrylate-ethyl methacrylate-methacrylic acid-vinyltoluene copolymer 478658-86-5DP, Burnock DN
 9180-2,2-bis(hydroxymethyl)propionic acid copolymer, blocked
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (microcapsules for image forming layer; planog. printing plate

precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)

IT 9003-53-6, Polystyrene
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)

IT 681-84-5, Tetramethoxysilane 211308-94-0
 RL: TEM (Technical or engineered material use); USES (Uses)
 (planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)

IT 7429-90-5, Aluminum, miscellaneous 25038-59-9, Poly(ethylene terephthalate), miscellaneous
 RL: MSC (Miscellaneous)
 (plate substrate; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)

IT 215958-19-3
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in image forming layer; planog. printing plate precursor having surface hydrophilic material and bound by a crosslinked alkoxide for nonstaining high quality prints)

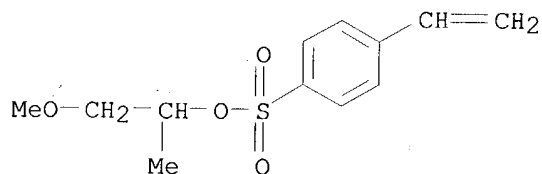
RN 215958-19-3 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

CMF C12 H16 O4 S



L38 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:566151 HCAPLUS

DN 137:132130

ED Entered STN: 31 Jul 2002

TI Heat-sensitive lithographic printing plate supports with excellent light resistance

IN Kita, Nobuyuki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41N001-14
 ICS G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

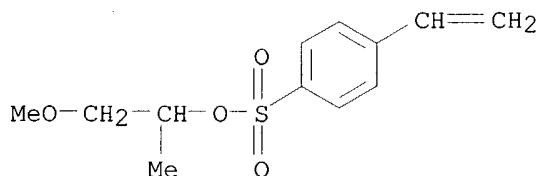
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002211150	A2	20020731	JP 2001-11825	20010119
PRAI	JP 2001-11825		20010119		
AB	The support has a lipophilic layer containing a polymer having a functional group generating sulfonic acid on heating, an acid-sensitive coloring material, and optionally a photothermal converter. The plate causes no discoloration due to normal light.				
ST	heat sensitive lithog printing plate support; lithog plate lipophilic layer light resistance; sulfonic acid polymer coating lithog plate				
IT	Coloring materials (acid-sensitive; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	Lithographic plates (heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	Polymers, uses RL: TEM (Technical or engineered material use); USES (Uses) (sulfonic acid-forming; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	548-62-9, Crystal violet RL: TEM (Technical or engineered material use); USES (Uses) (acid-sensitive pigments; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	37321-70-3, JIS A 1050 RL: TEM (Technical or engineered material use); USES (Uses) (anodized, substrate; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	87718-21-6, Acrylonitrile-benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid copolymer RL: TEM (Technical or engineered material use); USES (Uses) (binder; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	134127-48-3 RL: TEM (Technical or engineered material use); USES (Uses) (photothermal converter; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	215958-19-3 RL: TEM (Technical or engineered material use); USES (Uses) (sulfonic acid-forming polymer; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
IT	215958-19-3 RL: TEM (Technical or engineered material use); USES (Uses) (sulfonic acid-forming polymer; heat-sensitive lithog. plates having lipophilic coating layers for development-free laser exposure)				
RN	215958-19-3 HCAPLUS				
CN	Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)				

CM 1

CRN 215957-92-9

CMF C12 H16 O4 S



L38 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:513031 HCAPLUS
 DN 137:85973
 ED Entered STN: 10 Jul 2002
 TI Lithographic original plate and Young's modulus-controlled support
 IN Kawamura, Koichi; Takahashi, Miki
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41N001-14
 ICS G03F007-00; G03F007-09
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002192848	A2	20020710	JP 2000-398055	20001227
PRAI	JP 2000-398055		20001227		
AB	The support comprises a plastic film with Young's modulus ≥ 500 kg/mm ² having a hydrophilic surface made of graft polymer. The original plate comprises the support coated with an image-forming layer. The support shows good dimensional stability and hydrophilicity, and printing stain is prevented.				
ST	lithog plate plastic support Youngs modulus; graft polymer hydrophilic surface lithog plate support				
IT	Lithographic plates (lithog. original plate using Young's modulus-controlled support coated with graft polymer)				
IT	Polyesters, uses RL: TEM (Technical or engineered material use); USES (Uses) (lithog. original plate using Young's modulus-controlled support coated with graft polymer)				
IT	30528-89-3P, Allyl methacrylate-butyl methacrylate copolymer RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (lithog. original plate comprising hydrophilic support and heat-sensitive layer)				
IT	26022-14-0, Poly(hydroxyethyl acrylate) 215958-19-3 RL: TEM (Technical or engineered material use); USES (Uses) (lithog. original plate comprising hydrophilic support and heat-sensitive layer)				
IT	302542-20-7P, Acrylic acid-ethylene glycol-naphthalenedicarboxylic acid graft copolymer 440659-45-0P, Ethylene glycol-naphthalenedicarboxylic acid-sodium styrenesulfonate graft copolymer 440659-47-2P, Allyl				

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

methacrylate-Aronix M 210-methacrylic acid-sodium styrenesulfonate graft copolymer

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(lithog. original plate using Young's modulus-controlled support coated with graft polymer)

IT 24968-11-4, Poly(ethylene naphthalate) 25230-87-9

RL: TEM (Technical or engineered material use); USES (Uses)

(lithog. original plate using Young's modulus-controlled support coated with graft polymer)

IT 215958-19-3

RL: TEM (Technical or engineered material use); USES (Uses)

(lithog. original plate comprising hydrophilic support and heat-sensitive layer)

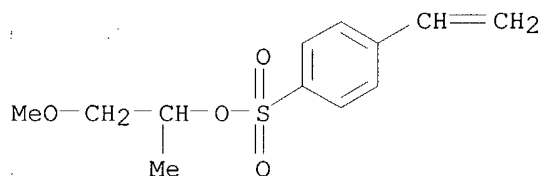
RN 215958-19-3 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

CMF C12 H16 O4 S



L38 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:381168 HCAPLUS

DN 136:393306

ED Entered STN: 22 May 2002

TI Direct-imaging lithographic original plate containing infrared absorbing agent

IN Ohashi, Hidekazu; Shimada, Kazuto

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 54 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41N001-14

ICS B41C001-055; G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002144750	A2	20020522	JP 2000-349715	20001116
	US 2002068241	A1	20020606	US 2001-964611	20010928
	US 2004086799	A1	20040506	US 2003-727633	20031205
PRAI	JP 2000-303953	A	20001003		
	JP 2000-349715	A	20001116		
	JP 2000-374529	A	20001208		
	JP 2000-374530	A	20001208		

US 2001-964611 A3 20010928

AB The plate comprises a support having a hydrophilic surface **coated** with an image-forming layer containing a hydrophobic IR absorbent having ≥ 1 functional group selected from SO₃-X⁺ and CO₂-X⁺ (X⁺ = iodonium, sulfonium, diazonium ion). The plate shows high sensitivity, printing durability, and gives clear images without stain.

ST IR sensitive direct imaging lithog plate; iodonium diazonium sulfonium sulfonate carbonate IR absorbent

IT Optical materials
(IR absorbers; direct-imaging lithog. original plate containing IR absorbing agent)

IT IR materials
(absorbers; direct-imaging lithog. original plate containing IR absorbing agent)

IT Phenolic resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(direct-imaging lithog. original plate containing IR absorbing agent).

IT Lithographic plates
(presensitized; direct-imaging lithog. original plate containing IR absorbing agent)

IT 56992-88-2
RL: TEM (Technical or engineered material use); USES (Uses)
(alkali-soluble polymer; direct-imaging lithog. original plate containing IR absorbing agent)

IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 427883-12-3
427898-71-3
RL: TEM (Technical or engineered material use); USES (Uses)
(direct-imaging lithog. original plate containing IR absorbing agent)

IT 52858-60-3 **215958-19-3** 427883-14-5 427883-16-7
RL: TEM (Technical or engineered material use); USES (Uses)
(polarity-changeable polymer; direct-imaging lithog. original plate containing IR absorbing agent)

IT **215958-19-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(polarity-changeable polymer; direct-imaging lithog. original plate containing IR absorbing agent)

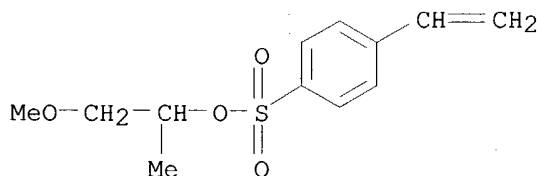
RN 215958-19-3 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

CMF C12 H16 O4 S



L38 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:113047 HCAPLUS

DN 136:175488

ED Entered STN: 12 Feb 2002

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

TI Lithographic direct printing plate with hydrophilic layer and hydrophobicity changeable layer
 IN Takahashi, Miki; Yamazaki, Sumiaki; Kawamura, Koichi
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 22 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41N001-14
 ICS G03F007-00; G03F007-004; G03F007-11
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

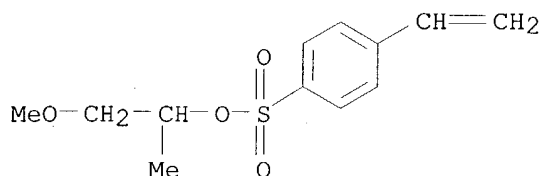
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002046360	A2	20020212	JP 2000-184838	20000620
PRAI	JP 2000-153262	A	20000524		
AB	The material comprises a support successively having thereon (a) a hydrophilic layer containing a polymer having a functional group forming a covalent bond with a functional group on the support by light and a hydrophilic functional group and (b) a layer in which hydrophilicity and hydrophobicity are changed by heat or radiation. It showed improved adhesion to the support, forming images by laser exposure with lower energy, and preventing thermal diffusion to an aluminum support.				
ST	lithog plate hydrophilic layer polymer; covalent bond hydrophilic layer support lithog plate; hydrophobicity changeable layer lithog plate				
IT	Lithographic plates (lithog. plate with hydrophilic layer and hydrophobicity changeable layer)				
IT	2530-85-0, 3-Methacryloxypropyltrimethoxysilane 11099-06-2, Tetraethoxysilane homopolymer RL: TEM (Technical or engineered material use); USES (Uses) (aluminum substrate coated with; lithog. plate with hydrophilic layer and hydrophobicity changeable layer)				
IT	52858-58-9 211308-94-0, Cyclohexyl p-styrenesulfonate homopolymer 215958-19-3 RL: TEM (Technical or engineered material use); USES (Uses) (hydrophobicity changeable layer; lithog. plate with hydrophilic layer and hydrophobicity changeable layer)				
IT	9003-01-4DP, Poly(acrylic acid), reaction products with methacryloyloxyethyl isocyanate, sodium salt 30674-80-7DP, 2-Methacryloyloxyethyl isocyanate, reaction products with poly(acrylic acid), sodium salt RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (lithog. plate with hydrophilic layer and hydrophobicity changeable layer)				
IT	357174-67-5 RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses) (polymerization initiator; lithog. plate with hydrophilic layer and hydrophobicity changeable layer)				
IT	215958-19-3 RL: TEM (Technical or engineered material use); USES (Uses) (hydrophobicity changeable layer; lithog. plate with hydrophilic layer and hydrophobicity changeable layer)				
RN	215958-19-3 HCAPLUS				
CN	Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)				

CM 1

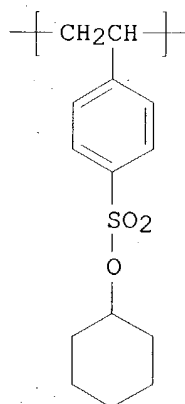
CRN 215957-92-9

CMF C12 H16 O4 S

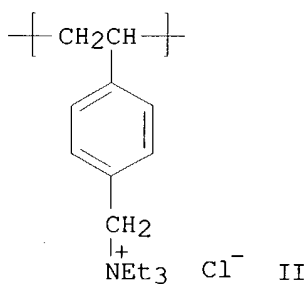


L38 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:595578 HCAPLUS
 DN 135:167771
 ED Entered STN: 17 Aug 2001
 TI Preparation of polyelectrolyte complexes in variety of thickness without
 use of shielding solvents
 IN Ohashi, Hidekazu
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 41 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM H01B001-06
 ICS C08J007-04; H01M006-18; H01M010-40
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 74, 76
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001222910	A2	20010817	JP 2000-30683	20000208
PRAI	JP 2000-30683		20000208		
GI					



I



II

AB The polyelectrolyte complexes, useful for lithog. original plates,

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

semiconductor mother boards, etc., are manufactured by (i) application of solns. containing macromols. bearing heat-labile acid precursor groups and macromols. bearing (heat-labile precursor groups for) pos.-charged functional groups and (ii) heat treatment of the substrates.

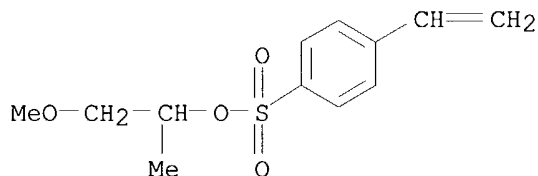
Alternatively, the solns. may comprise macromols. bearing heat-labile acid precursor groups and (heat-labile precursor groups for) pos.-charged functional groups. Thus, 2.66 g of I and 2.54 g of II were dissolved in acetonitrile/1-methoxy-2-propanol, applied on Al plate, dried, and heated at 170° to give a chemical-stable polyelectrolyte complex layer useful for a recording layer of a lithog. original plate.

- ST polyelectrolyte complex manuf macromol **coating** heating;
thickness variety permitted polyelectrolyte complex manuf; acid precursor polymer heating polyelectrolyte complexation
- IT Polyelectrolytes
(complexes of; preparation of polyelectrolyte complexes in variety of thickness without use of shielding solvents)
- IT Semiconductor devices
(mother plates for; preparation of polyelectrolyte complexes in variety of thickness without use of shielding solvents)
- IT Lithographic plates
(original plates; preparation of polyelectrolyte complexes in variety of thickness without use of shielding solvents)
- IT Complexation
(preparation of polyelectrolyte complexes in variety of thickness without use of shielding solvents)
- IT 55063-43-9DP, complex with vinylbenzenesulfonic acid ester homopolymer **215958-19-3DP**, complex with poly[(dimethyliminio)ethylene chloride] 354528-66-8P 354528-67-9P **354528-68-0P** 354528-69-1P **354528-70-4P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of polyelectrolyte complexes in variety of thickness without use of shielding solvents)
- IT **215958-19-3DP**, complex with poly[(dimethyliminio)ethylene chloride] **354528-68-0P 354528-70-4P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of polyelectrolyte complexes in variety of thickness without use of shielding solvents)
- RN 215958-19-3 HCAPLUS
- CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

CMF C12 H16 O4 S



RN 354528-68-0 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, hexafluorophosphate(1-),

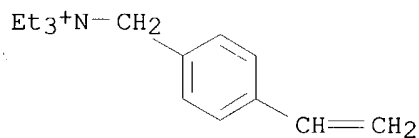
homopolymer, compd. with 2-methoxy-1-methylethyl 4-ethenylbenzenesulfonate
homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 289892-94-0
CMF (C15 H24 N . F6 P)x
CCI PMS

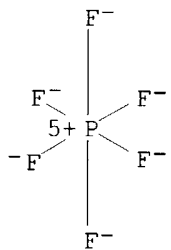
CM 2

CRN 62858-92-8
CMF C15 H24 N



CM 3

CRN 16919-18-9
CMF F6 P
CCI CCS

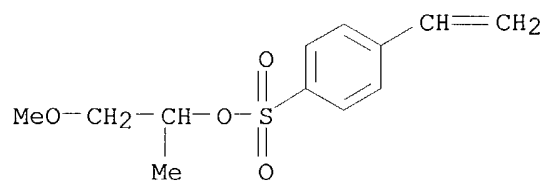


CM 4

CRN 215958-19-3
CMF (C12 H16 O4 S)x
CCI PMS

CM 5

CRN 215957-92-9
CMF C12 H16 O4 S



RN 354528-70-4 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, ethyl ester, homopolymer, compd. with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 64080-86-0

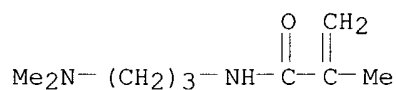
CMF (C9 H18 N2 O) x

CCI PMS

CM 2

CRN 5205-93-6

CMF C9 H18 N2 O



CM 3

CRN 29192-51-6

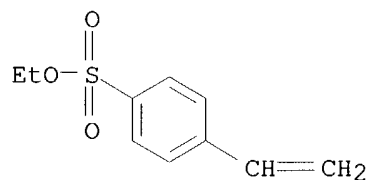
CMF (C10 H12 O3 S) x

CCI PMS

CM 4

CRN 16736-98-4

CMF C10 H12 O3 S



L38 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:444440 HCAPLUS

DN 135:53531

ED Entered STN: 20 Jun 2001

TI Offset lithography and its apparatus possessing laser-patternable polymer

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

layers bearing sulfonic acid-releasing groups
 IN Kawamura, Koichi
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41F007-02
 ICS B41C001-055; B41N001-14; G03F007-00
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
 Section cross-reference(s): 38

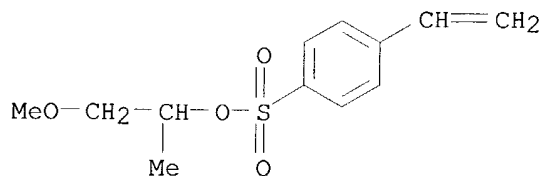
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001162762	A2	20010619	JP 1999-348906	19991208
PRAI	JP 1999-348906		19991208		
AB	In the process, plate cylinders are cleaned by built-in cleaning units, coated with laser-imageable layers containing polymers generating sulfonic acids upon heating, cured, and digitally patterned to form images with high hydrophilic/hydrophobic discrimination.				
ST	offset lithog hydrophilic pattern high discrimination; sulfonic acid releasing polymer digital lithog; laser imageable offset lithog plate cylinder				
IT	Hydrophilicity Lithographic apparatus (offset lithog. apparatus possessing laser-patternable polymer layers bearing sulfonic acid-releasing groups)				
IT	Sulfonic acids, processes RL: PEP (Physical, engineering or chemical process); PROC (Process) (offset lithog. apparatus possessing laser-patternable polymer layers bearing sulfonic acid-releasing groups)				
IT	Lithography (offset; offset lithog. apparatus possessing laser-patternable polymer layers bearing sulfonic acid-releasing groups)				
IT	Laser radiation (patterning by; offset lithog. apparatus possessing laser-patternable polymer layers bearing sulfonic acid-releasing groups)				
IT	211424-32-7	211424-51-0	215958-44-4	215958-47-7	
	RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses) (patterning layers; offset lithog. apparatus possessing laser-patternable polymer layers bearing sulfonic acid-releasing groups)				
IT	215958-44-4	215958-47-7			
	RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses) (patterning layers; offset lithog. apparatus possessing laser-patternable polymer layers bearing sulfonic acid-releasing groups)				
RN	215958-44-4	HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with 2-methoxy-1-methylethyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)				

CM 1

CRN 215957-92-9

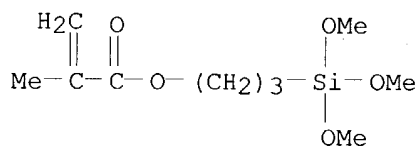
CMF C12 H16 O4 S



CM 2

CRN 2530-85-0

CMF C10 H20 O5 Si



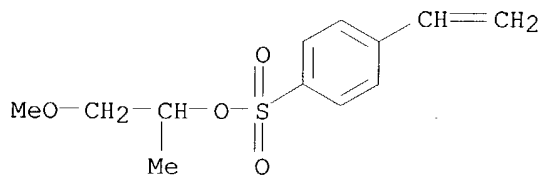
RN 215958-47-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
2-methoxy-1-methylethyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

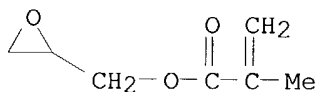
CMF C12 H16 O4 S



CM 2

CRN 106-91-2

CMF C7 H10 O3



L38 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:442230 HCAPLUS

DN 135:53530

ED Entered STN: 19 Jun 2001

TI Heat-sensitive lithographic original plates having antistaining

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

coatings for computer-to-plate systems

IN Kita, Nobuyuki
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41N001-14
 ICS G03F007-00; G03F007-11
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
 Section cross-reference(s): 38, 41, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001162962	A2	20010619	JP 1999-346321	19991206
PRAI	JP 1999-346321		19991206		
AB	The plates, showing high laser sensitivity and excellent antistaining property in handling, possess (i) laser-patternable layers containing polymers whose hydrophilicity or lipophilicity change upon heating and (ii) water-soluble overcoat layers containing light-heat converting agents in the order on supports (suitably A1). The polymers may bear sidechains forming sulfonic acids upon heating.				
ST	heat sensitive lithog plate antistaining coating ; hydrophilicity changeable lithog plate acrylic overcoat; IR absorbing dye sepd laser lithog				
IT	Dyes (IR-absorbing; heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	Coating materials (antisoiling, water-soluble, overcoat layers; heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	Sulfonic acids, preparation RL: PNU (Preparation, unclassified); PREP (Preparation) (heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	Laser ablation (patterning by; heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	Lithographic plates (presensitized; heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	112077-76-6	289893-03-4	340800-65-9	344578-16-1	
	RL: TEM (Technical or engineered material use); USES (Uses) (IR absorbing dyes; heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	37321-70-3,	JIS A 1050			
	RL: TEM (Technical or engineered material use); USES (Uses) (heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	52229-50-2,	Gantrez AN 139BF	213914-08-0	220406-46-2	
	344578-11-6 RL: TEM (Technical or engineered material use); USES (Uses) (laser-patternable layers; heat-sensitive lithog. original plates having antistaining overcoat layers for computer-to-plate systems)				
IT	9003-01-4,	Poly(acrylic acid)	27119-07-9,	2-Acrylamido-2-methyl-1-propanesulfonic acid homopolymer	54193-36-1, Poly(methacrylic acid) sodium salt

RL: TEM (Technical or engineered material use); USES (Uses)
(overcoat layers; heat-sensitive lithog. original plates having
antistaining overcoat layers for computer-to-plate systems)

IT 213914-08-0 220406-46-2

RL: TEM (Technical or engineered material use); USES (Uses)
(laser-patternable layers; heat-sensitive lithog. original plates
having antistaining overcoat layers for computer-to-plate systems)

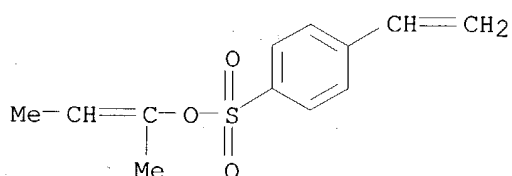
RN 213914-08-0 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, 1-methyl-1-propenyl ester, homopolymer
(9CI) (CA INDEX NAME)

CM 1

CRN 213914-07-9

CMF C12 H14 O3 S



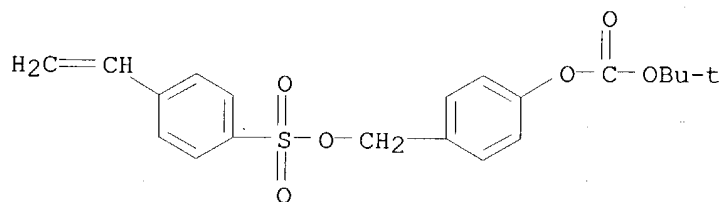
RN 220406-46-2 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, [4-[[[(1,1-dimethylethoxy)carbonyl]oxy]phenyl]methyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 220406-45-1

CMF C20 H22 O6 S



L38 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:207910 HCAPLUS

DN 134:239035

ED Entered STN: 22 Mar 2001

TI Processless imaging material containing heat-sensitive sulfonate polymer

IN Zheng, Shiyang; Dominh, Thap

PA Kodak Polychrome Graphics Company Ltd., USA

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM B41M005-36

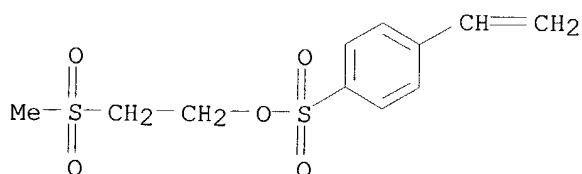
ICS B41C001-10

CC 42-13 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1084861	A2	20010321	EP 2000-305537	20000630
	EP 1084861	A3	20010418		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6146812	A	20001114	US 1999-399191	19990917
	US 2002048718	A1	20020425	US 1999-431706	19991101
	US 6413694	B2	20020702		
PRAI	US 1999-399191	A	19990917		
	US 1999-431706	A	19991101		
	US 1998-156833	A2	19980918		
AB	A pos.-working imaging member is composed of a heat-sensitive surface imageable layer having a heat-sensitive polymer containing heat-activatable sulfoimino, sulfoalkyl, or sulfoamide groups, and a photothermal conversion material. Upon application of thermal energy, such as from IR irradiation, the sulfonate groups decompose rendering exposed areas more hydrophilic. The exposed imaging member can be contacted with a lithog. printing ink and used for printing without post-imaging wet processing. This imaging member is particularly useful for direct write imaging using IR lasers or thermal printing heads.				
ST	sulfonate polymer imaging material; photothermal conversion material				
IT	imaging; heat sensitive polymer imaging material				
IT	Dyes (IR radiation-absorbing; processless imaging material containing heat-sensitive sulfonate polymer)				
IT	Lithographic plates (processless imaging material containing heat-sensitive sulfonate polymer)				
IT	Carbon black, uses RL: TEM (Technical or engineered material use); USES (Uses) (processless imaging material containing heat-sensitive sulfonate polymer)				
IT	137897-14-4 269399-69-1 306767-49-7 330195-69-2 330195-70-5 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (processless imaging material containing heat-sensitive sulfonate polymer)				
IT	134127-48-3 RL: TEM (Technical or engineered material use); USES (Uses) (processless imaging material containing heat-sensitive sulfonate polymer)				
IT	330195-69-2 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (processless imaging material containing heat-sensitive sulfonate polymer)				
RN	330195-69-2 HCAPLUS				
CN	Benzenesulfonic acid, 4-ethenyl-, 2-(methylsulfonyl)ethyl ester, homopolymer (9CI) (CA INDEX NAME)				
CM	1				
CRN	330195-68-1				
CMF	C11 H14 O5 S2				



L38 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:712849 HCAPLUS
 DN 133:288916
 ED Entered STN: 10 Oct 2000
 TI Non-silver type heat-developable image-forming material with
undercoat layer containing vinylidene chloride polymer
 IN Ohkawa, Atsuhiko; Naoi, Takashi
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 46 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41M005-26
 ICS B41M005-30; G03C001-675
 CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000280625	A2	20001010	JP 1999-93086	19990331
PRAI	JP 1999-93086		19990331		
OS	MARPAT 133:288916				
AB	The material developed at 80-140° comprises a support having an undercoat layer with thickness ≥0.3 μm (total thickness on one side) on both sides containing vinylidene chloride copolymer with ≥70 weight% vinylidene chloride monomer as a repeating unit. The material may contain a compound generating an acid by the action of heat or an acid and another compound which changes absorption at 360-900 nm by the inter- or intra-mol. reaction caused by the acid. The material shows good dimensional stability and thermal shrinkage is prevented on development.				
ST	thermog material undercoat layer vinylidene chloride polymer; heat developable image forming material; acid generator absorption changeable compd thermog				
IT	Thermographic copying (non-silver type heat-developable image-forming material with undercoat layer containing vinylidene chloride polymer)				
IT	168281-30-9				
	RL: DEV (Device component use); USES (Uses) (acid generator; non-silver type heat-developable image-forming material with undercoat layer containing vinylidene chloride polymer)				
IT	136160-47-9P	268747-60-0P			
	RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses) (acid generator; non-silver type heat-developable image-forming material with undercoat layer containing vinylidene chloride polymer)				
IT	54140-75-9, Acrylic acid-acrylonitrile-methyl acrylate-methyl				

methacrylate-vinylidene chloride copolymer **223106-55-6**
300372-68-3

RL: DEV (Device component use); USES (Uses)

(non-silver type heat-developable image-forming material with
undercoat layer containing vinylidene chloride polymer)

IT 270910-39-9P 270910-40-2P **270910-43-5P 300374-98-5P**

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(non-silver type heat-developable image-forming material with
undercoat layer containing vinylidene chloride polymer)

IT 220406-43-9P 268747-61-1P 268747-64-4P 270910-42-4P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation and polymerization of)

IT 1076-59-1 1613-37-2, Quinoline N-oxide 24566-90-3, Chloromethyl octyl ether

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of absorption changeable compound)

IT 87184-99-4P 268747-66-6P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of acid generator)

IT 98-59-9, p-Toluenesulfonyl chloride 110-63-4, 1,4-Butanediol, reactions
18162-48-6, tert-Butyldimethylsilyl chloride 24424-99-5, tert-Butyl dicarbonate

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of acid generator)

IT 300372-74-1P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of monomer having absorption changeable group)

IT 868-77-9 96478-09-0 270910-34-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of monomer having absorption changeable group)

IT 268747-67-7P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of vinyl monomer having acid-generating group)

IT 2633-67-2, p-Styrenesulfonyl chloride 3587-60-8, Benzyl chloromethyl ether 72875-02-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of vinyl monomer having acid-generating group)

IT **223106-55-6**

RL: DEV (Device component use); USES (Uses)

(non-silver type heat-developable image-forming material with
undercoat layer containing vinylidene chloride polymer)

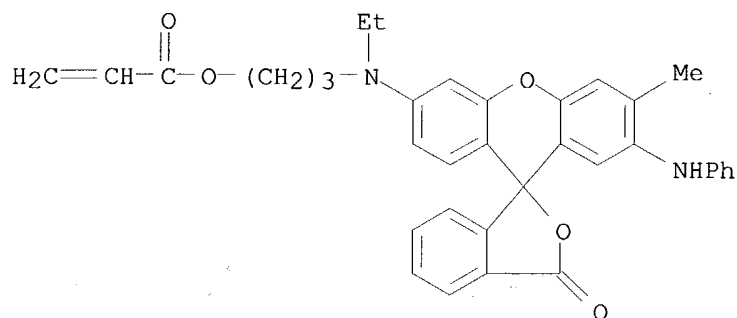
RN 223106-55-6 HCAPLUS

CN Butanoic acid, 2-[[[(4-ethenylphenyl)sulfonyl]oxy]methyl]-2-methyl-3-oxo-,
1,1-dimethylethyl ester, polymer with 3-[ethyl[6'-methyl-3-oxo-7'-
(phenylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3'-yl]amino]propyl
2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 223106-54-5

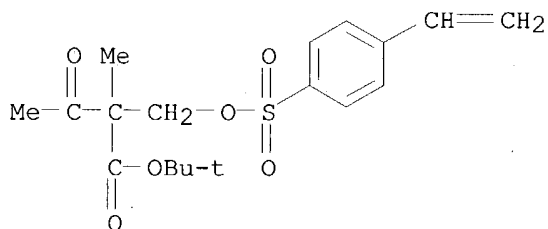
CMF C35 H32 N2 O5



CM 2

CRN 220406-43-9

CMF C18 H24 O6 S



IT 270910-43-5P 300374-98-5P

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(non-silver type heat-developable image-forming material with **undercoat** layer containing vinylidene chloride polymer)

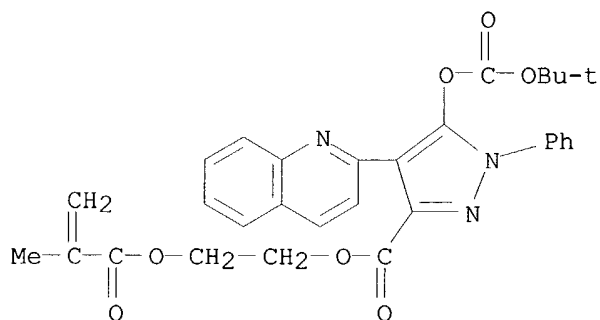
RN 270910-43-5 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 5-[[[(1,1-dimethylethoxy)carbonyl]oxy]-1-phenyl-4-(2-quinolinyl)-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 1,1-dimethylethyl 2-[[[(4-ethenylphenyl)sulfonyl]oxy]methyl]-2-methyl-3-oxobutanoate (9CI) (CA INDEX NAME)

CM 1

CRN 270910-42-4

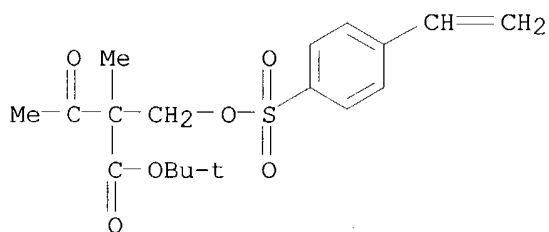
CMF C30 H29 N3 O7



CM 2

CRN 220406-43-9

CMF C18 H24 O6 S



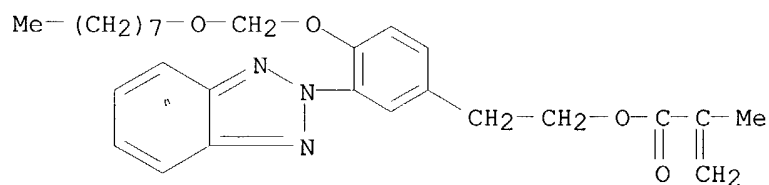
RN 300374-98-5 HCAPLUS

CN Butanoic acid, 2-[[[(4-ethenylphenyl)sulfonyl]oxy]methyl]-2-methyl-3-oxo-,
1,1-dimethylethyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-
[(octyloxy)methoxy]phenyl]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX
NAME)

CM 1

CRN 268747-64-4

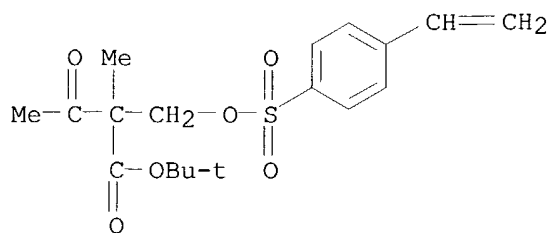
CMF C27 H35 N3 O4



CM 2

CRN 220406-43-9

CMF C18 H24 O6 S



L38 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:529188 HCAPLUS
 DN 133:157683
 ED Entered STN: 03 Aug 2000
 TI Photosensitive lithographic form plate using an image-forming material
 IN Kawamura, Koichi; Nakamura, Ippei; Oohashi, Hidekazu
 PA Fuji Photo Film Co., Ltd., Japan
 SO U.S., 54 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC G03C001-72
 NCL 430270100
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6096479	A	20000801	US 1999-259345	19990301
	US 6331375	B1	20011218	US 2000-525169	20000314
PRAI	JP 1998-47713	A	19980227		
	JP 1998-74630	A	19980323		
	JP 1998-371209	A	19981225		
	JP 1999-8488	A	19990114		
	US 1999-259345	A2	19990301		

OS MARPAT 133:157683

AB A photosensitive lithog. form plate that can be directly prepared by using digital signals from a computer or the like by using an IR laser or the like (i.e., a photosensitive lithog. form plate that can be directly prepared), through using an image-forming material that can be directly inscribed with heat generated by irradiation of a laser light and is suitable for use in a lithog. form plate. The image-forming material used in the present invention comprises an IR light absorbing agent having a hydrophobic group which changes to hydrophilic due to heat. The image-forming material may further contain a macromol. binder insol. in H2O and soluble in an aqueous solution of an alkali, or a macromol. binder that is decomposed by heat or with an acid and becomes soluble in H2O or an alkali. In an exposed portion of the photosensitive layer, the IR light absorbing agent is decomposed due to heat by irradiation of IR light, and an acid is generated.

ST photosensitive lithog plate cyanine dye

IT IR lasers

Laser radiation

Lithographic plates

Photoimaging materials

Printing (nonimpact)

(photosensitive lithog. form plate using image-forming material and containing IR light-absorbing agent)

IT Silica gel, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (photosensitive lithog. form plate using image-forming material and containing IR light-absorbing agent)

IT 107-95-9, β -Alanine
 RL: MOA (Modifier or additive use); USES (Uses)
 (photosensitive lithog. form plate using aluminum substrate and **undercoat** containing)

IT 96-48-0, γ -Butyrolactone 2390-60-5, VICTORIA PURE BLUE BOH
 22873-93-4, 1-Naphthalenesulfonate 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 85568-56-5, MEGAFAC F-177 **215958-19-3**
 RL: MOA (Modifier or additive use); USES (Uses)
 (photosensitive lithog. form plate using aluminum substrate **coated** with photosensitive liquid containing)

IT 41532-84-7P 63857-00-1P 240128-49-8P 240128-50-1P 240821-85-6P
 RL: IMF (Industrial manufacture); PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (photosensitive lithog. form plate using image-forming material and containing IR light-absorbing agent)

IT 240415-76-3P 240415-78-5P 240415-79-6P 240821-89-0P 240821-91-4P
 240821-93-6P 240821-97-0P 240821-99-2P 240822-01-9P 240822-05-3P
 287118-74-5P 287185-68-6P 287186-14-5P 287186-16-7P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (photosensitive lithog. form plate using image-forming material and containing IR light-absorbing agent)

IT 240128-38-5 240128-40-9 240128-52-3 240415-74-1 240821-86-7
 240821-87-8 240822-06-4 287118-70-1 287118-72-3
 RL: MOA (Modifier or additive use); USES (Uses)
 (photosensitive lithog. form plate using image-forming material and containing IR light-absorbing agent)

IT 78-10-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (photosensitive lithog. form plate using image-forming material and containing IR light-absorbing agent)

IT 7429-90-5P, Aluminum, reactions
 RL: IMF (Industrial manufacture); PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (photosensitive lithog. form plate using substrate of)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

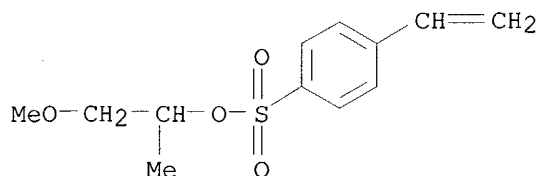
(1) Anon; EP 0566103 1993 HCAPLUS
 (2) Anon; EP 0652483 1995 HCAPLUS
 (3) Anon; EP 784233 1997 HCAPLUS
 (4) Tomizawa; US 5976658 1999

IT **215958-19-3**
 RL: MOA (Modifier or additive use); USES (Uses)
 (photosensitive lithog. form plate using aluminum substrate **coated** with photosensitive liquid containing)

RN 215958-19-3 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9
 CMF C12 H16 O4 S



L38 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:470338 HCAPLUS
 DN 133:96832
 ED Entered STN: 12 Jul 2000
 TI Lithographic original plate with silane and transition metal
coating on substrate
 IN Hotta, Hisashi
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 59 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41N001-14
 ICS G03F007-004; G03F007-075
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000190648	A2	20000711	JP 1998-373781	19981228
PRAI	JP 1998-373781		19981228		
AB	The lithog. original plate has a surface coating containing a resin, which has siloxane bonds and silanol groups, and a transition metal compound on a substrate. The lithog. original plate does not require a development step after exposure scanning.				
ST	lithog original plate substrate coating				
IT	Lithographic plates (original; lithog. original plate with surface coating having silane and transition metal compds.)				
IT	215957-92-9P RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (resin for coating lithog. original plate substrate)				
IT	215958-19-3P RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (resin for coating lithog. original plate substrate)				
IT	107-98-2, 1-Methoxy-2-propanol 2633-67-2, p-Vinylbenzenesulfonyl chloride 212580-45-5 221041-24-3 252275-46-0 RL: RCT (Reactant); RACT (Reactant or reagent) (resin for coating lithog. original plate substrate)				
IT	10141-05-6, Cobalt nitrate 10361-80-5, Praseodymium nitrate 10377-66-9, Manganese nitrate 10421-48-4 RL: TEM (Technical or engineered material use); USES (Uses) (transition metal compound for lithog. original plate)				
IT	215958-19-3P RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				

(resin for **coating** lithog. original plate substrate)

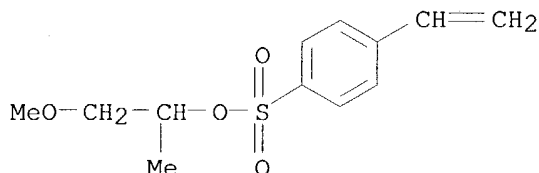
RN 215958-19-3 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, 2-methoxy-1-methylethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 215957-92-9

CMF C12 H16 O4 S



L38 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:472051 HCAPLUS

DN 131:151745

ED Entered STN: 02 Aug 1999

TI Manufacture of lithographic plate containing polymer having acid-generating group

IN Maemoto, Kazuo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-004

ICS B41C001-10; B41N001-14; G03F007-00; G03F007-26; G03F007-40; H01L021-027

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other **Reprographic** Processes)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11202483	A2	19990730	JP 1998-7062	19980116
PRAI	JP 1998-7062		19980116		

AB A lithog. original plate, comprising a support **coated** with a photosensitive layer containing (a) a polymer having functional groups which generate an sulfonic acid or carboxylic acid by the action of acid in its side chain, (b) a compound which absorbs energy to generate an acid, and (c) a compound which imparts energy to (b) by absorbing visible rays, is imagewise exposed to a laser in the visible region to give a lithog. plate in the absence of a step of developing the original plate. This process is capable of direct platemaking by recording using solid or semiconductor lasers in the visible region in accordance with digital data to obtain a lithog. plate with high discrimination without development.

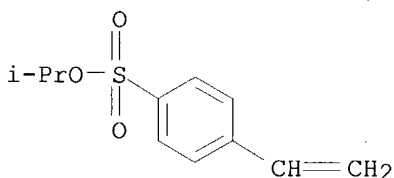
ST lithog plate polymer acid generating group; presensitized lithog plate platemaking

IT Lithographic plates

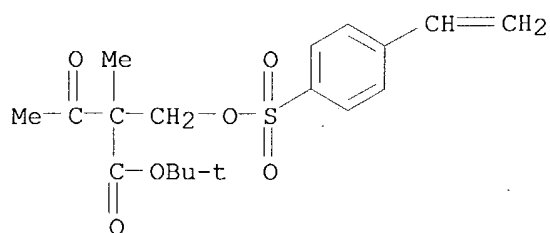
(presensitized; presensitized lithog. plate containing polymer with acid generating group, photoacid generator, and light absorbent)

IT 220406-43-9P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);
 RACT (Reactant or reagent)
 (preparation and polymerization of)
 IT 79293-24-6P, Isopropyl p-styrenesulfonate homopolymer
 211308-94-0P, Cyclohexyl p-styrenesulfonate homopolymer 212515-45-2P
 213914-14-8P 220406-44-0P 220406-46-2P
 220406-50-8P
 RL: DEV (Device component use); PNU (Preparation, unclassified); PREP
 (Preparation); USES (Uses)
 (presensitized lithog. plate containing polymer with acid generating group,
 photoacid generator, and light absorbent)
 IT 39864-41-0, Styrenesulfonyl chloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with hydroxymethyl acetoacetate derivative)
 IT 72875-02-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with styrenesulfonyl chloride)
 IT 118234-41-6
 RL: DEV (Device component use); MOA (Modifier or additive use); USES
 (Uses)
 (spectral sensitizer; presensitized lithog. plate containing polymer with
 acid generating group, photoacid generator, and light absorbent)
 IT 79293-24-6P, Isopropyl p-styrenesulfonate homopolymer
 220406-44-0P 220406-46-2P 220406-50-8P
 RL: DEV (Device component use); PNU (Preparation, unclassified); PREP
 (Preparation); USES (Uses)
 (presensitized lithog. plate containing polymer with acid generating group,
 photoacid generator, and light absorbent)
 RN 79293-24-6 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, 1-methylethyl ester, homopolymer (9CI)
 (CA INDEX NAME)
 CM 1
 CRN 79293-23-5
 CMF C11 H14 O3 S



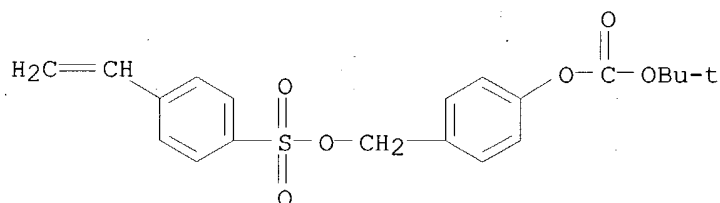
RN 220406-44-0 HCAPLUS
 CN Butanoic acid, 2-[[[(4-ethenylphenyl)sulfonyl]oxy]methyl]-2-methyl-3-oxo-,
 1,1-dimethylethyl ester, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 220406-43-9
 CMF C18 H24 O6 S



RN 220406-46-2 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, [4-[[[(1,1-dimethylethoxy)carbonyl]oxy]phenyl]methyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

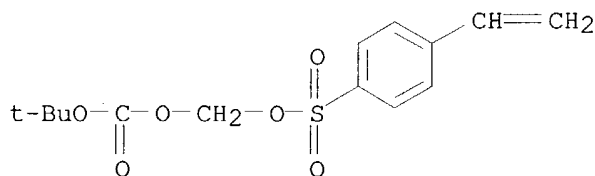
CRN 220406-45-1
 CMF C20 H22 O6 S



RN 220406-50-8 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, [[[(1,1-dimethylethoxy)carbonyl]oxy]methyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 220406-49-5
 CMF C14 H18 O6 S



L38 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1999:78743 HCAPLUS
 DN 130:175343
 ED Entered STN: 05 Feb 1999
 TI Lithographic original plate capable of direct platemaking using IR ray laser
 IN Kitatani, Katsushi; Aono, Toshiaki
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 21 pp.
 CODEN: JKXXAF

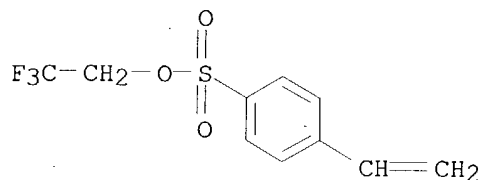
DT Patent
 LA Japanese
 IC ICM G03F007-11
 ICS B41C001-055; B41N001-14; G03F007-00; G03F007-004; G03F007-039
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11030867	A2	19990202	JP 1997-186971	19970711
PRAI	JP 1997-186971		19970711		
AB	The title original plate comprises a support laminated with a recording layer containing a polymer having functional groups generating a sulfonic acid upon heating in its side chain and an IR absorbent and then with an overcoat layer containing an inorg. layered compound The original plate is capable of direct platemaking from digital data by using IR ray lasers and shows improved storage stability under high moisture conditions.				
ST	lithog plate IR platemaking acrylic polymer; sulfonic acid generator polymer lithog plate; inorg layer compd mica lithog plate				
IT	Lithographic plates (lithog. original plate for IR laser platemaking having magnetic layer containing sulfone-containing polymer and IR absorber)				
IT	211308-94-0P	211424-32-7P	211424-51-0P	212247-57-9P	
	212247-58-0P	215958-05-7P	215958-06-8P	215958-07-9P	215958-09-1P
	220434-69-5P				
	RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses) (lithog. original plate for IR laser platemaking having magnetic layer containing sulfone-containing polymer)				
IT	130396-08-6P	137961-78-5P	163268-64-2P	211308-93-9P	
	RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (lithog. original plate for IR laser platemaking having magnetic layer containing sulfone-containing polymer)				
IT	75-89-8, 2,2,2-Trifluoroethyl alcohol 98-09-9, Benzenesulfonyl chloride 108-93-0, Cyclohexyl alcohol, reactions 2633-67-2, p-Vinylbenzenesulfonyl chloride 6131-64-2, N-Methyl-p-styrenesulfonamide 21715-90-2 RL: RCT (Reactant); RACT (Reactant or reagent) (lithog. original plate for IR laser platemaking having magnetic layer containing sulfone-containing polymer)				
IT	22371-56-8, NK 3508	55281-19-1, NK 2268			
	RL: DEV (Device component use); USES (Uses) (lithog. original plate for IR laser platemaking having magnetic layer containing sulfone-containing polymer and IR absorber of)				
IT	182636-27-7, Somasif ME 100 RL: DEV (Device component use); USES (Uses) (lithog. original plate for IR laser platemaking having over coat layer containing inorg. layered compound of)				
IT	212247-57-9P RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses) (lithog. original plate for IR laser platemaking having magnetic layer containing sulfone-containing polymer)				
RN	212247-57-9 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with 2,2,2-trifluoroethyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)				

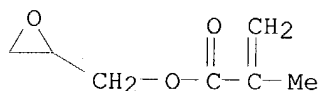
CM 1

CRN 130396-08-6
CMF C10 H9 F3 O3 S



CM 2

CRN 106-91-2
CMF C7 H10 O3



L38 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:576531 HCAPLUS
DN 129:223277
ED Entered STN: 10 Sep 1998
TI Lithographic original plate capable of direct platemaking from digital data
IN Maemoto, Kazuo; Kawamura, Koichi; Kitatani, Katsushi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM B41C001-055
ICS G03F007-039; G03F007-36
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes).
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10230582	A2	19980902	JP 1997-36665	19970220
	US 6017677	A	20000125	US 1998-12596	19980123
PRAI	JP 1997-10755		19970124		
	JP 1997-26877		19970210		
	JP 1997-26878		19970210		
	JP 1997-36665		19970220		
AB	The title original plate comprises a support coated with a recording layer containing a polymer having a functional group that generates sulfonic acid upon heating in its side chain, an IR absorbent, and an acid-generating agent. The original plate is capable of direct platemaking from digital data by using IR lasers and is water-developable or dose not need development process.				
ST	sulfonic acid generating polymer lithog plate; IR absorbent lithog plate				

platemaking; acid generator lithog plate

IT Optical materials
Optical materials
(IR absorbers; lithog. plate containing polymer having sulfonic acid-generating group, IR absorbent, and acid generator)

IT IR materials
IR materials
(absorbers; lithog. plate containing polymer having sulfonic acid-generating group, IR absorbent, and acid generator)

IT Lithographic plates
(lithog. plate containing polymer having sulfonic acid-generating group, IR absorbent, and acid generator)

IT 23178-67-8, NK 2014 54957-10-7, IR 125 178208-95-2
RL: TEM (Technical or engineered material use); USES (Uses)
(IR absorbent; lithog. plate containing polymer having sulfonic acid-generating group, IR absorbent, and acid generator)

IT 84938-93-2 87263-95-4 115168-59-7 166658-57-7 212515-54-3
RL: TEM (Technical or engineered material use); USES (Uses)
(acid generator; lithog. plate containing polymer having sulfonic acid-generating group, IR absorbent, and acid generator)

IT **29192-52-7P 79293-24-6P 126351-96-0P**
211308-94-0P 211424-32-7P **211424-34-9P** 211424-51-0P
211424-54-3P 212515-45-2P 212515-47-4P 212515-49-6P
212515-51-0P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(lithog. plate containing polymer having sulfonic acid-generating group, IR absorbent, and acid generator)

IT 211308-93-9P
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of)

IT 2633-67-2, 4-Vinylbenzenesulfonyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with cyclohexyl alc.)

IT 108-93-0, Cyclohexyl alcohol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with vinylbenzenesulfonyl chloride)

IT **29192-52-7P 79293-24-6P 126351-96-0P**
211424-34-9P 211424-54-3P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(lithog. plate containing polymer having sulfonic acid-generating group, IR absorbent, and acid generator)

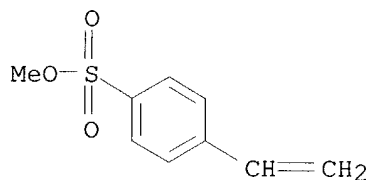
RN 29192-52-7 HCAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, methyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 16736-97-3

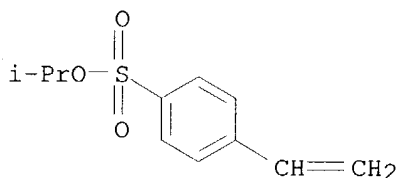
CMF C9 H10 O3 S



RN 79293-24-6 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, 1-methylethyl ester, homopolymer (9CI)
 (CA INDEX NAME)

CM 1

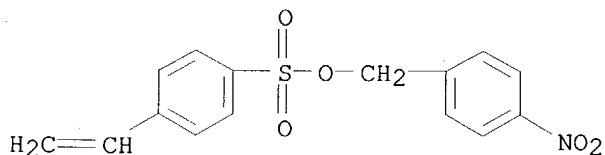
CRN 79293-23-5
 CMF C11 H14 O3 S



RN 126351-96-0 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, (4-nitrophenyl)methyl ester, homopolymer
 (9CI) (CA INDEX NAME)

CM 1

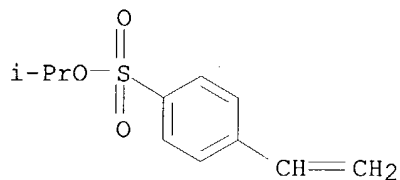
CRN 122506-83-6
 CMF C15 H13 N O5 S



RN 211424-34-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with
 1-methylethyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

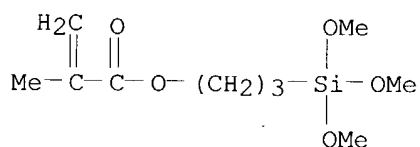
CRN 79293-23-5
 CMF C11 H14 O3 S



CM 2

CRN 2530-85-0

CMF C10 H20 O5 Si



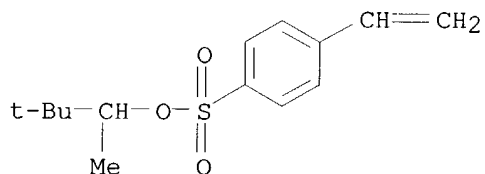
RN 211424-54-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
1,2,2-trimethylpropyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 211424-53-2

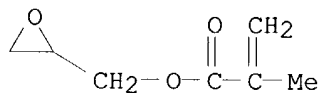
CMF C14 H20 O3 S



CM 2

CRN 106-91-2

CMF C7 H10 O3



L38 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:545684 HCAPLUS

DN 129:209364

ED Entered STN: 27 Aug 1998

TI Lithographic original plate capable of direct platemaking using infrared laser
 IN Kawamura, Koichi; Kitatani, Katsushi; Kobayashi, Fumikazu; Maemoto, Kazuo
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-004
 ICS B41C001-055; B41N001-14; G03F007-00; G03F007-033
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

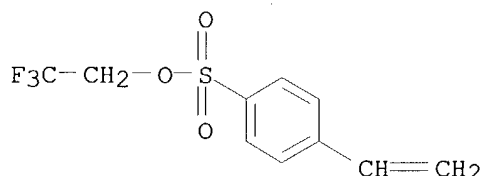
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10221842	A2	19980821	JP 1997-26877	19970210
	US 6017677	A	20000125	US 1998-12596	19980123
PRAI	JP 1997-10755		19970124		
	JP 1997-26877		19970210		
	JP 1997-26878		19970210		
	JP 1997-36665		19970220		
AB	The title original plate comprises a support coated with a recording layer containing a polymer having functional groups that generates a sulfonic acid by the action of base in its side chain and a heat-base-generating agent. The original plate is capable of direct platemaking from digital data by using IR laser and forming images without wet development process and the resulting printing plate shows high printing durability.				
ST	lithog plate platemaking base precursor; polymer sulfonic acid generating group lithog				
IT	Lithographic plates (lithog. original plate containing base precursor and polymer having sulfonic acid-generating group)				
IT	211308-94-0P	211424-32-7P	211424-51-0P	212247-57-9P	
	212247-58-0P				
	RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (lithog. original plate containing base precursor and polymer having sulfonic acid-generating group)				
IT	5150-56-1,	Guanidine trichloroacetate	100906-66-9		
	RL: TEM (Technical or engineered material use); USES (Uses) (lithog. original plate containing base precursor and polymer having sulfonic acid-generating group)				
IT	130396-08-6P	137961-78-5P	211308-93-9P		
	RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (preparation and polymerization of)				
IT	2633-67-2				
	RL: RCT (Reactant); RACT (Reactant or reagent) (reaction with alc.)				
IT	75-89-8,	2,2,2-Trifluoroethyl alcohol	108-93-0,	Cyclohexyl alcohol,	
	reactions 21715-90-2				
	RL: RCT (Reactant); RACT (Reactant or reagent) (reaction with vinylbenzenesulfonyl chloride)				
IT	212247-57-9P				
	RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (lithog. original plate containing base precursor and polymer having sulfonic acid-generating group)				

RN 212247-57-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
 2,2,2-trifluoroethyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

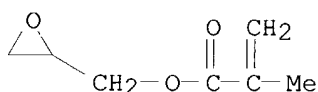
CM 1

CRN 130396-08-6
 CMF C10 H9 F3 O3 S



CM 2

CRN 106-91-2
 CMF C7 H10 O3



L38 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1996:694149 HCAPLUS
 DN 125:312467
 ED Entered STN: 25 Nov 1996
 TI Method of forming lithographic printing plate by using electrophotographic process
 IN Kato, Eiichi
 PA Fuji Photo Film Co Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 85 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03G013-26
 ICS G03G013-16
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
 Section cross-reference(s): 38, 42
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08211661	A2	19960820	JP 1995-314560	19951201
	US 5691094	A	19971125	US 1995-565232	19951130
PRAI	JP 1994-321192		19941201		

AB The process comprises the steps of forming a peelable transfer layer made from a chemical removable resin (A) on an electrophotog. photoreceptor, forming a toner image on the transfer layer, transferring the transfer layer and the toner image onto a primary receptor, transferring the

transfer layer and the toner image onto a receptor whose surface will become hydrophilic for lithog. printing, and removing the non-image area of the transfer layer by a chemical processing. The transfer layer is formed using a melt **coating**, an electrodeposition **coating**, or a transfer method. The resin (A) comprises a polymer (AH) with the glass transition temperature of 30-140° or the softening point of 35-180° and a polymer (AL) with the glass transition temperature of ≤40° or the softening temperature of ≤45°. The temperature difference between the glass transition temperature or the softening temperature

of the 2 polymers is ≥2°.

ST lithog printing plate manuf electrophotog process; **coating** process lithog printing plate manuf; melt **coating** lithog printing plate manuf; electrodeposition **coating** lithog printing plate manuf; transfer **coating** lithog printing plate manuf

IT **Coating** process

(melt **coating**; method of forming lithog. printing plate by using electrophotog. process)

IT Lithographic plates

(method of forming lithog. printing plate by using electrophotog. process)

IT 150551-83-0 150551-84-1 150551-90-9 150551-91-0 150551-93-2
150624-89-8

RL: CAT (Catalyst use); USES (Uses)

(method of forming lithog. printing plate by using electrophotog. process)

IT 25639-21-8D, reaction product with 3-thioethylcarbonyloxy-2-hydroxypropyl methacrylate 166594-77-0, Acrylic acid-benzyl methacrylate-2-methoxy-ethyl methacrylate copolymer 183370-88-9 183370-93-6 183370-97-0
183371-19-9 183371-30-4 183371-35-9 183371-63-3

RL: NUU (Other use, unclassified); USES (Uses)

(method of forming lithog. printing plate by using electrophotog. process)

IT 27155-22-2D, reaction products with thioglycolic acid 29192-53-8
34306-73-5, Acrylic acid-ethyl methacrylate-methyl methacrylate copolymer
41629-91-8, Ethyl acrylate-methyl methacrylate-2-sulfoethyl methacrylate
copolymer 60608-80-2 65697-22-5 71544-34-8, Acrylic
acid-2-methoxy-ethyl acrylate-methyl methacrylate copolymer 150625-22-2
150642-13-0 155292-96-9 169045-58-3, 2-Carboxy-ethyl acrylate-methyl
methacrylate-methyl acrylate copolymer 169045-60-7 169045-63-0
169045-64-1 169045-65-2 169045-68-5 169045-71-0 169045-72-1
169045-73-2 **169045-75-4** 169045-91-4 169046-28-0
169046-29-1 169046-30-4 169046-32-6 176762-52-0 176762-54-2
176762-63-3 176762-65-5 176762-66-6 176762-67-7 176762-71-3
176763-02-3 176771-22-5 182558-88-9 182558-89-0 182558-90-3
182558-92-5 182558-93-6 182558-94-7 182558-95-8 183317-19-3
183317-36-4 183371-09-7 183371-12-2 183371-15-5 183371-22-4
183371-40-6 183371-44-0 183371-47-3 183371-49-5 183371-51-9
183371-54-2 183371-56-4 183371-58-6 183371-60-0 183371-62-2

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(method of forming lithog. printing plate by using electrophotog. process)

IT **169045-75-4**

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(method of forming lithog. printing plate by using electrophotog. process)

RN 169045-75-4 HCAPLUS

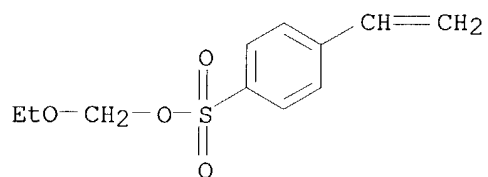
CN Benzenesulfonic acid, 4-ethenyl-, polymer with ethenylbenzene,
ethenylmethylbenzene and ethoxymethyl 4-ethenylbenzenesulfonate (9CI) (CA

INDEX NAME)

CM 1

CRN 169045-74-3

CMF C11 H14 O4 S



CM 2

CRN 25013-15-4

CMF C9 H10

CCI IDS



D1-Me

D1-CH=CH2

CM 3

CRN 100-42-5

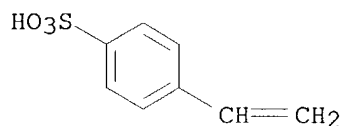
CMF C8 H8

H2C=CH-Ph

CM 4

CRN 98-70-4

CMF C8 H8 O3 S



L38 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1995:994730 HCAPLUS
 DN 124:101881
 ED Entered STN: 22 Dec 1995
 TI Preparation of printing plate by electrophotographic process
 IN Kato, Eiichi; Momota, Makoto; Ohishi, Hiroyuki
 PA Fuji Photo Film Co., Ltd., Japan
 SO Eur. Pat. Appl., 129 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM G03G013-28
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 676673	A1	19951011	EP 1995-105297	19950407
	EP 676673	B1	19991222		
	R: DE, GB				
	US 5601958	A	19970211	US 1995-413467	19950328
	JP 07325435	A2	19951212	JP 1995-108291	19950407
PRAI	JP 1994-95691		19940408		

AB A method for preparation of a printing plate by an electrophotog. process comprises forming a peelable transfer layer capable of being removed upon a chemical reaction treatment on a surface of an electrophotog. light-sensitive element, forming a toner image by an electrophotog. process on the transfer layer, heat-transferring the toner image together with the transfer layer onto a receiving material having a surface capable of providing a hydrophilic surface suitable for lithog. printing at the time of printing, and removing the transfer layer on the receiving material upon the chemical reaction treatment, wherein the transfer layer is formed by an electrodeposition **coating** method using thermoplastic resin grains (A1) each containing a resin (A1) having a glass transition point of 10-140°C or a softening point of 35-180°C and a resin (A2) having a glass transition point of ≤45°C or a softening point of ≤60°C and its glass transition point or softening point is ≥2°C lower than that of the resin (A1). The transfer layer shows excellent transferability onto a receiving material under transfer conditions of low temperature and high speed to form transferred images of good qualities.

ST lithog offset printing plate transfer layer; electrophotog lithog plate transfer layer

IT Electrophotography
 (lithog. offset printing plate prepared by)

IT Lithographic plates
 (offset, preparation of lithog. plate by electrophotog. process)

IT 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(lithog. plate transfer layer from)

IT 25766-25-0P 157859-17-1P 172598-26-4P 172598-27-5P 172598-28-6P
 172598-29-7P 172598-30-0P 172598-31-1P 172598-32-2P 172598-33-3P
 172598-34-4P 172598-35-5P 172598-36-6P 172598-37-7P 172598-38-8P
 172598-39-9P 172598-40-2P 172598-41-3P 172598-42-4P 172598-43-5P
 172598-44-6P 172598-45-7P 172598-46-8P 172598-47-9P 172598-48-0P
172598-49-1P 172598-50-4P 172598-51-5P 172598-52-6P
 172598-53-7P 172598-54-8P 172598-55-9P 172598-56-0P 172598-57-1P
 172598-58-2P 172598-59-3P 172598-60-6P 172598-61-7P 172598-62-8P
 172598-63-9P 172598-64-0P
 RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (transfer layer for preparation of lithog. plate by electrophotog. process)

IT **172598-49-1P**
 RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (transfer layer for preparation of lithog. plate by electrophotog. process)

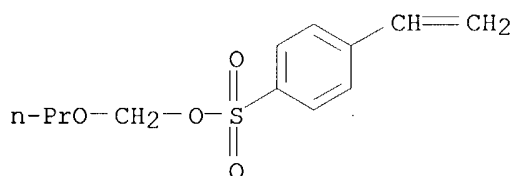
RN 172598-49-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with octadecyl 2-methyl-2-propenoate, phenylmethyl 2-methyl-2-propenoate, 2-propenoic acid and propoxymethyl 4-ethenylbenzenesulfonate, graft (9CI) (CA INDEX NAME)

CM 1

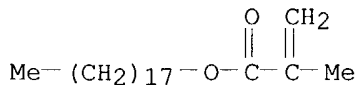
CRN 169046-08-6

CMF C12 H16 O4 S



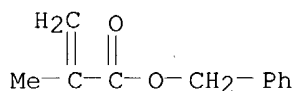
CM 2

CRN 32360-05-7
 CMF C22 H42 O2



CM 3

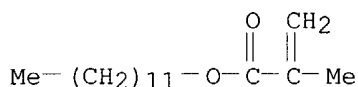
CRN 2495-37-6
 CMF C11 H12 O2



CM 4

CRN 142-90-5

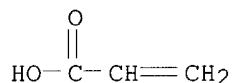
CMF C16 H30 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



L38 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:136156 HCAPLUS

DN 118:136156

ED Entered STN: 30 Mar 1993

TI Electrophotographic lithographic master

IN Kato, Eiichi; Ishii, Kazuo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03G005-147

ICS G03G013-28

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04177254	A2	19920624	JP 1990-303993	19901113
PRAI	JP 1990-303993		19901113		

AB In the title master comprising an elec. conductive support having thereon one or more photoconductive layers, the uppermost photoconductive layer is **coated** with a layer containing a graft copolymer formed from a monofunctional monomer containing F or Si and a macromer with weight average mol. weight

≤2 + 104. Further details on the said macromer are given;

for example, the said macromer comprises either (CHB1CB2XR1) or

(CHB1CB2R2) wherein X = CO2, OCO, O, SO2, etc.; R1 = C1-18 aliphatic group,

C6-12 aromatic moiety; B1, B2 = H, cyano, hydrocarbon, etc.; R2 = CN, CONH2, (substituted) Ph.

ST electrophotog master polymer prepn lithog

IT Lithographic plates
(master for making, graft copolymer for)

IT Electrophotographic photoconductors and photoreceptors
(polymer for, for lithog. platemaking)

IT 144012-28-2P 144012-29-3P 144012-30-6P 146188-80-9P
146188-81-0P 146188-82-1P 146188-83-2P 146188-85-4P
 146188-86-5P 146219-86-5P
 RL: PREP (Preparation)
 (preparation of, for electrophotog. master)

IT 29931-28-0P 96595-56-1P 141415-08-9P 141415-38-5P 141415-63-6P
 143349-02-4P 143349-03-5P 143349-07-9P 144012-25-9DP, reaction
 product with methacrylic acid anhydride 144112-20-9P 145807-37-0P
 145807-39-2P 145807-48-3P 146188-78-5DP, reaction product with
 methacrylic acid chloride 146188-79-6DP, reaction product with glycidyl
 methacrylate and N,N-dimethyldodecyl methacrylate
 RL: PREP (Preparation)
 (preparation of, in preparation of polymer)

IT **146188-81-0P**
 RL: PREP (Preparation)
 (preparation of, for electrophotog. master)

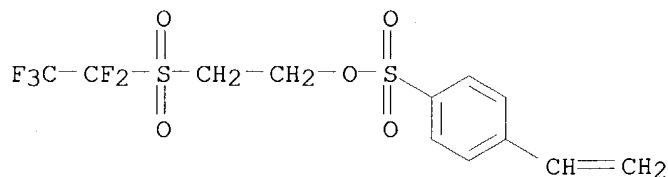
RN 146188-81-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with methyl 2-propenoate
 and 2-[(pentafluoroethyl)sulfonyl]ethyl 4-ethenylbenzenesulfonate, graft
 (9CI) (CA INDEX NAME)

CM 1

CRN 143987-89-7

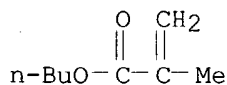
CMF C12 H11 F5 O5 S2



CM 2

CRN 97-88-1

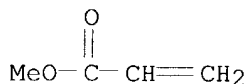
CMF C8 H14 O2



CM 3

CRN 96-33-3

CMF C4 H6 O2



L38 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1991:72345 HCAPLUS
 DN 114:72345
 ED Entered STN: 23 Feb 1991
 TI Fine patterning of resists
 IN Ogawa, Kazufumi
 PA Matsushita Electric Industrial Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-26
 ICS G03F007-095; H01L021-027
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
 Section cross-reference(s): 76
 FAN.CNT 1

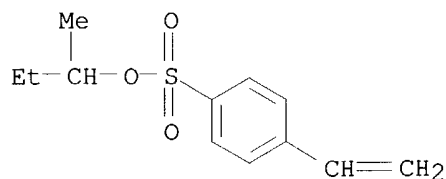
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02132446	A2	19900521	JP 1989-195101	19890726
	JP 2543195	B2	19961016		
	US 5015559	A	19910514	US 1989-379864	19890714
PRAI	JP 1988-185970		19880726		

AB The title film patterning is affected by **coating** a substrate with a resist in which groups convertible to amino or sulfonic acid groups upon exposure to a 1st energy beam are chemical bonded to a base polymer chain, patternwise exposing with the 1st energy beam to form a exposed surface layer pattern, selectively adsorbing a material capable of absorbing a 2nd energy beam on the surface layer pattern, overall exposing with the 2nd energy beam, and developing to remove the resist from the areas not having an image.

ST photoresist patterning device fabrication; microlithog resist patterning
 IT Semiconductor devices
 (fabrication, fine patterning of photoresist for)
 IT Resists
 (photo-, amino or sulfonic acid group-yielding polymer containing, patterning of)
 IT 131756-66-6 **131756-68-8**
 RL: USES (Uses)
 (photoresist containing, for fine patterning)
 IT **131756-68-8**
 RL: USES (Uses)
 (photoresist containing, for fine patterning)
 RN 131756-68-8 HCAPLUS
 CN Benzenesulfonic acid, 4-ethenyl-, 1-methylpropyl ester, polymer with 4-ethenylphenol (9CI) (CA INDEX NAME)

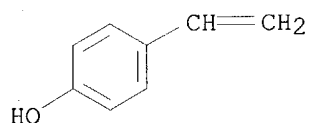
CM 1
 CRN 131756-67-7

CMF C12 H16 O3 S



CM 2

CRN 2628-17-3
CMF C8 H8 O



L38 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:449875 HCAPLUS
DN 113:49875
ED Entered STN: 03 Aug 1990
TI Blanks for lithographic platemaking using electrophotography
IN Kato, Eiichi; Ishii, Kazuo
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03G005-14
ICS B41N001-14; G03G015-28
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01306855	A2	19891211	JP 1988-135704	19880603
PRAI	JP 1988-135704		19880603		
AB	The title blanks for lithog. platemaking possess a surface layer containing a combination of (1) ≥1 resin containing ≥1 functional group which generates ≥1 group selected from SH, phospho, amino, and SO3H and (2) a thermal- and/or photohardening resin. Following water sensitization, superior hydrophilicity and wet strength are demonstrated.				
ST	lithog plate electrophotog				
IT	Lithographic plates (electrophotog. plates for production of, resin coating for)				
IT	Electrophotographic plates (for lithog. plate production, resin layer for)				
IT	25189-05-3	25702-92-5	30528-89-3	121559-25-9	124661-04-7
	126815-26-7	126815-56-3	126815-57-4	127195-08-8	127195-09-9
	127195-10-2	127195-11-3	127195-13-5	128043-26-5	128043-27-6

128043-28-7 128043-29-8 128043-30-1 128043-31-2 128043-32-3
 128043-33-4 128043-34-5 128043-35-6 128043-36-7 128043-37-8
 128043-38-9 128043-39-0 128043-40-3 128043-42-5 **128063-40-1**
 128093-43-6 128093-45-8

RL: USES (Uses)

(electrophotog. plate with surface layer containing, for lithog.
 platemaking)

IT **128063-40-1**

RL: USES (Uses)

(electrophotog. plate with surface layer containing, for lithog.
 platemaking)

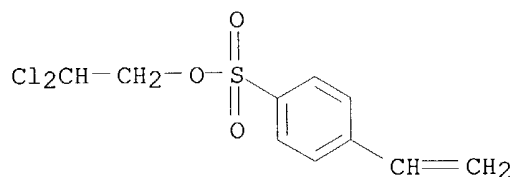
RN 128063-40-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2,2-dichloroethyl
 4-ethenylbenzenesulfonate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 126815-54-1

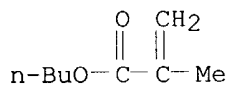
CMF C10 H10 Cl2 O3 S



CM 2

CRN 97-88-1

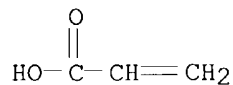
CMF C8 H14 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



L38 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:108608 HCAPLUS

DN 112:108608

ED Entered STN: 18 Mar 1990

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

TI Lithographic master plates
 IN Kato, Eiichi; Ishii, Kazuo
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03G013-28
 ICS B41M005-18; B41N001-10
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01114860	A2	19890508	JP 1987-270308	19871028
PRAI	JP 1987-270308		19871028		

AB In lithog. master plates using a electrophotog. photoreceptor comprising a surface layer, a photoconductive layer, and a conductive support, the surface layer contains ≥ 1 resin having a functional group which can produce SO₃H by decomposition. The surface of materials shows both high hydrophilicity and water-resistance, resulting in stain-free background and excellent printability. Thus, an In₂O₃-deposited PET film was **coated** with a composition containing 4,4'-bis(diethylamino)-2,2'-dimethyltriphenylmethane, polycarbonate of bisphenol A, anilide compound, and a sensitizer, thereon **coated** with a copolymer prepared from n-Bu methacrylate, Et methacrylate, CH₂:CMeCO₂(CH₂)₂SO₃CH₂CF₃, and acrylic acid with azobisisobutyronitrile to give a lithog. master plate, which gave 104 good prints.

ST lithog master plate; sulfo group surface layer lithog

IT Lithographic plates

(with surface layer containing sulfo group-productive resins, with stain-free background and good printability)

IT	122506-78-9	122506-80-3	122506-86-9	122506-90-5	122506-92-7
	122506-94-9	122506-96-1	122529-80-0	124036-12-0	124090-84-2
	125566-88-3	125566-90-7			

RL: USES (Uses)

(lithog. master plate surface layer containing, for stain-free background and good printability)

IT **124090-84-2**

RL: USES (Uses)

(lithog. master plate surface layer containing, for stain-free background and good printability)

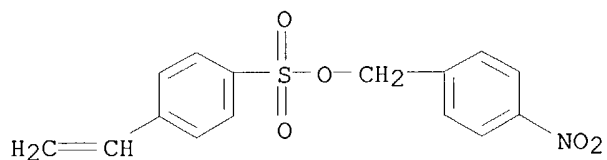
RN 124090-84-2 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-methyl-2-propenoate, ethyl 2-methyl-2-propenoate and (4-nitrophenyl)methyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 122506-83-6

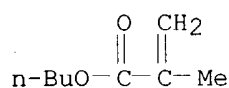
CMF C15 H13 N O5 S



CM 2

CRN 97-88-1

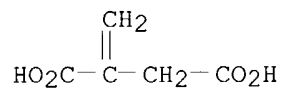
CMF C8 H14 O2



CM 3

CRN 97-65-4

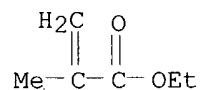
CMF C5 H6 O4



CM 4

CRN 97-63-2

CMF C6 H10 O2



L38 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:644385 HCAPLUS

DN 111:244385

ED Entered STN: 23 Dec 1989

TI Direct-imaging type lithographic original plates with an image-receiving layer containing a resin forming sulfo groups as the binder

IN Kato, Eiichi; Ishii, Kazuo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41N001-10

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

ICS B41N001-14; G03F007-02

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01114488	A2	19890508	JP 1987-271822	19871029
	JP 07096343	B4	19951018		
PRAI	JP 1987-271822		19871029		

AB Direct-imaging type lithog. original plates have on a support an image-receiving layer containing ≥ 1 resin having ≥ 1 functional group which forms sulfo group by decomposition as a main constituent of the binder. The plates provide high quality prints without greasing and exhibit good printing durability. Thus, Bu methacrylate 32, Et methacrylate 28, acrylic acid 0.2, and CH₂:CMeCO₂(CH₂)₂SO₂CH₂SEt 40 parts were copolymd., and a composition containing the copolymer, Et methacrylate-acrylic

acid copolymer, and ZnO was coated on a paper support with an interlayer and a back-coat layer to give an original plate. A lithog. plate obtained from the plate by using a plain paper copier gave >2000 high quality prints without greasing.

ST direct imaging lithog original plate; binder image receiving layer lithog

IT Lithographic plates

(direct-imaging, binders, containing sulfo-group forming resins, with no greasing and good printing durability)

IT	122506-80-3	122506-86-9	122506-88-1	122506-90-5	122506-92-7
	122506-94-9	122506-96-1	122507-00-0	122529-80-0	124036-10-8
	124036-12-0	124061-63-8	124090-84-2		

RL: USES (Uses)

(binder, for direct-imaging lithog. plate)

IT 124090-84-2

RL: USES (Uses)

(binder, for direct-imaging lithog. plate)

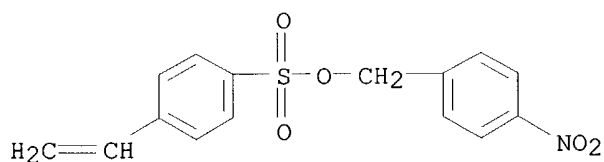
RN 124090-84-2 HCAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-methyl-2-propenoate, ethyl 2-methyl-2-propenoate and (4-nitrophenyl)methyl 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 122506-83-6

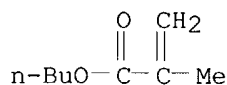
CMF C15 H13 N O5 S



CM 2

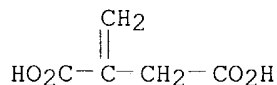
CRN 97-88-1

CMF C8 H14 O2



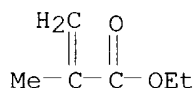
CM 3

CRN 97-65-4
CMF C5 H6 04



CM 4

CRN 97-63-2
CMF C6 H10 02



L38 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:523882 HCAPLUS
DN 111:123882
ED Entered STN: 01 Oct 1989
TI Electrophotography type lithographic original plates using
electrophotographic photoreceptors
IN Kato, Eiichi; Ishii, Kazuo
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03G013-28
ICS B41N001-14
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01070767	A2	19890316	JP 1987-226692	19870911
PRAI	JP 1987-226692		19870911		

AB In lithog. original plates using electrophotog. photoreceptors prepared by forming a photoconductive layer having ≥1 layer containing photoconductive ZnO and a binder on a conductive support, ≥1 resin of the binder has a functional group forming sulfo group by decomposition The original plates exhibit good desensitizing properties and provide high quality images and lithog. plates giving high quality prints without greasing and showing good printing durability. Thus, a composition containing

Bu

methacrylate-Et methacrylate-acrylic acid-CH₂:CMeCO₂(CH₂)₂SO₂OCH₂CF₃ copolymer (42:48:0.2:10 weight ratio), ZnO, Rose Bengal, and phthalic anhydride was **coated** on a conductive paper support. The photoreceptor showed good electrostatic properties and desensitizing properties and gave high quality images, and a lithog. plate from it provided high quality prints.

ST lithog original plate electrophotog photoreceptor; binder resin lithog original plate; sulfo group resin lithog plate; zinc oxide electrophotog photoreceptor lithog

IT Lithographic plates
(binder for, sulfo-group forming polymers as, with image background whiteness and printing durability)

IT Electrophotographic plates:
(for lithog., containing sulfo-group forming polymers as binders, with image background whiteness and printing durability)

IT 122506-78-9 122506-80-3 122506-82-5 **122506-84-7**
122506-86-9 122506-88-1 122506-90-5 122506-92-7 122506-94-9
122506-96-1 122506-98-3 122507-00-0 122529-80-0
RL: USES (Uses)
(binder, for electrophotog. lithog. plate)

IT 1314-13-2, Zinc oxide, uses and miscellaneous
RL: USES (Uses)
(photoconductive substance, binder for, sulfo-group forming polymer as)

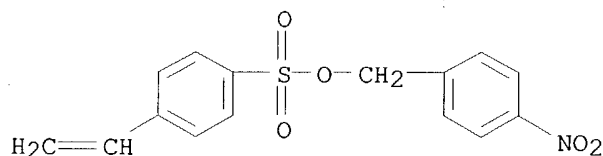
IT **122506-84-7**
RL: USES (Uses)
(binder, for electrophotog. lithog. plate)

RN 122506-84-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethyl 2-methyl-2-propenoate, (4-nitrophenyl)methyl 4-ethenylbenzenesulfonate and 2-propenoic acid (9CI) (CA INDEX NAME)

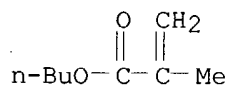
CM 1

CRN 122506-83-6
CMF C15 H13 N O5 S



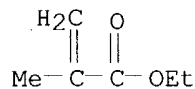
CM 2

CRN 97-88-1
CMF C8 H14 O2



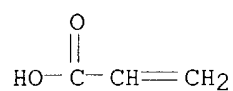
CM 3

CRN 97-63-2
CMF C6 H10 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2

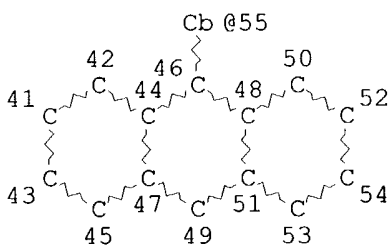
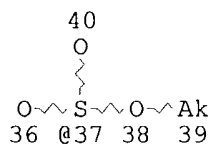
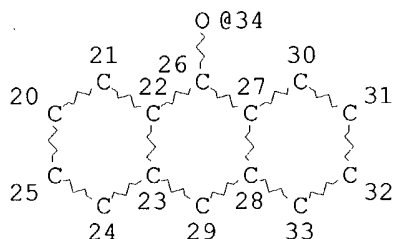
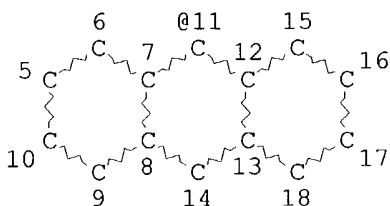


formula 2

=> D QUE L42
L10
L12

SCR 2043
STR

C=C~G1~G2
1 2 3 4



Ak~O
@56 @57

VAR G1=AK/CB/56-2 57-4
VAR G2=11/34/37/55
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 55

STEREO ATTRIBUTES: NONE

L15 367 SEA FILE=REGISTRY SSS FUL L12 AND L10
 L19 103410 SEA FILE=REGISTRY ABB=ON 2508.17/RID
 L20 132 SEA FILE=REGISTRY ABB=ON L15 AND L19
 L39 132 SEA FILE=HCAPLUS ABB=ON L20
 L41 39 SEA FILE=HCAPLUS ABB=ON L39 AND COAT?/SC,SX,AB,BI
 L42 11 SEA FILE=HCAPLUS ABB=ON L41 AND REPROGR?/SC,SX

=> D L42 BIB ABS HITIND HITSTR 1-11

L42 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:912700 HCAPLUS
 DN 139:388496
 TI Photoresist compositions and halogenated sulfonic acid generator
 IN Thackeray, James W.; Cameron, James F.; Sinta, Roger F.
 PA Shipley Company, L.L.C., USA
 SO U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 470,067.
 CODEN: USXXCO

DT Patent
 LA English

FAN.CNT 3

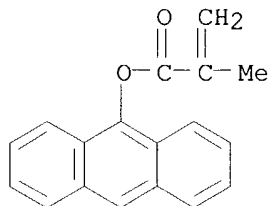
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003215748	A1	20031120	US 2003-457282	20030609
	US 6081366	A	20000627	US 1997-921984	19970828
	US 6645698	B1	20031111	US 1999-470067	19991222
PRAI	US 1997-921984	A1	19970828		
	US 1999-470067	A2	19991222		
	US 1997-921985	A1	19970828		
OS	MARPAT 139:388496				
AB	Photoresist compns. comprise a resin binder with an acid labile blocking group with an activation energy in excess of 20 Kcal/mol. for deblocking, a photoacid generator capable of generating a halogenated sulfonic acid upon photolysis and optionally, a base. It has been found that PEB (post-exposure baked) sensitivity as a consequence of a high temperature bake				
is	substantially reduced when using the halogenated sulfonic acid generator of the invention, and the base additive also contributes to a reduction in the PEB sensitivity. The photoresists of the invention provide photoresist coating composition capable of forming highly resolved relief images of submicron dimension with vertical or essentially vertical sidewalls, uniformly imaged across the full width of a wafer over which the photoresist is coated , regardless of the temperature differential across the surface of the resist coating during the bake step.				
IC	ICM G03F007-039				
NCL	430285100; 430914000; 430925000; 430921000; 430919000; 430920000; 430270100				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
IT	200808-68-0, tert-Butylacrylate-4-hydroxystyrene-styrene copolymer 229326-02-7				
	RL: TEM (Technical or engineered material use); USES (Uses) (photoresist compns. and halogenated sulfonic acid generator)				
IT	229326-02-7				
	RL: TEM (Technical or engineered material use); USES (Uses) (photoresist compns. and halogenated sulfonic acid generator)				
RN	229326-02-7 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 9-anthracenyl ester, polymer with				

2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 32468-70-5

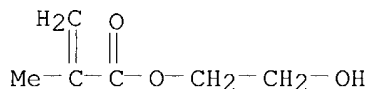
CMF C18 H14 O2



CM 2

CRN 868-77-9

CMF C6 H10 O3



L42 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:291857 HCAPLUS

DN 136:316933

TI Antireflective porogens for forming porous organo polysilica dielec. materials in fabrication of electronic devices

IN Zampini, Anthony; Gallagher, Michael K.

PA Shipley Company L.L.C., USA

SO Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1197998	A2	20020417	EP 2001-308629	20011009
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002284997	A2	20021003	JP 2001-312551	20011010
	US 2002065331	A1	20020530	US 2001-974072	20011011
	US 6576681	B2	20030610		
	US 2002198269	A1	20021226	US 2002-154504	20020524
	US 6599951	B2	20030729		
	US 2003022953	A1	20030130	US 2002-192893	20020711
	US 6596405	B2	20030722		
PRAI	US 2000-239026P	P	20001010		
	US 2001-974072	A3	20011011		
AB	The present invention relates to removable porogen composition useful for forming porous organo polysilica dielec. materials in the fabrication of				

electronic devices, wherein the porogen comprises one or more chromophores. The porogens of the present invention are useful in reducing dielec. consts. of organo polysilica dielec. materials. Also disclosed are methods of forming electronic devices including the step of forming a relief image on an organo polysilica dielec. materials, wherein the relief image is formed without the use of antireflective coatings.

IC ICM H01L021-312

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other **Reprographic** Processes)

Section cross-reference(s): 35, 38, 76

IT 115775-34-3, Butyl acrylate-trimethylolpropane trimethacrylate-3-(trimethoxysilyl)propyl methacrylate copolymer 352694-60-1, Butyl acrylate-hydroxypropyl methacrylate-trimethylolpropane trimethacrylate-3-(trimethoxysilyl)propyl methacrylate copolymer 352694-61-2, Butyl acrylate-divinylbenzene-vinyltrimethoxysilane copolymer 352694-62-3, Divinylbenzene-poly(propylene glycol)methyl ether acrylate-vinyltrimethoxysilane copolymer 352694-64-5, Divinylbenzene-poly(propylene glycol)methyl ether acrylate-vinyltrimethylsilane copolymer 352694-69-0, Butyl acrylate-trimethylolpropane trimethacrylate-vinyltrimethylsilane copolymer **405296-71-1**, 9-Anthracenyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate-trimethylolpropane trimethacrylate copolymer 410536-27-5, Divinylbenzene-polyethylene glycol methyl ether acrylate-vinyltrimethoxysilane copolymer **410536-28-6**, 9-Anthryl methacrylate-polyethylene glycol methyl ether acrylate-trimethylolpropane trimethacrylate-vinyltrimethoxysilane copolymer 410536-29-7, Hexyl acrylate-methyl methacrylate-polyethylene glycol methyl ether acrylate-trimethylolpropane trimethacrylate-vinyltrimethoxysilane copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(porogen; antireflective porogens for forming porous organo polysilica dielec. materials in fabrication of electronic devices)

IT **405296-71-1**, 9-Anthracenyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate-trimethylolpropane trimethacrylate copolymer **410536-28-6**, 9-Anthryl methacrylate-polyethylene glycol methyl ether acrylate-trimethylolpropane trimethacrylate-vinyltrimethoxysilane copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(porogen; antireflective porogens for forming porous organo polysilica dielec. materials in fabrication of electronic devices)

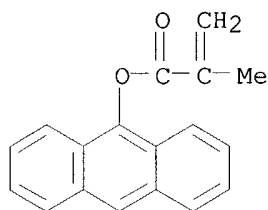
RN 405296-71-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[2-methyl-1-oxo-2-propenyl]oxy]methyl]-1,3-propanediyl ester, polymer with 9-anthracenyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

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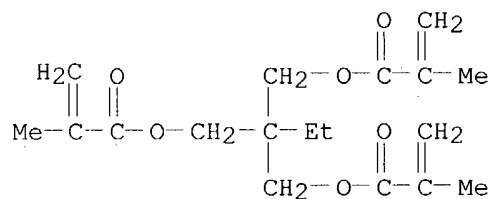
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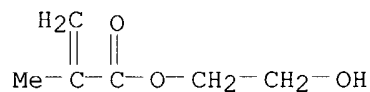
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CRN 3290-92-4
CMF C18 H26 O6



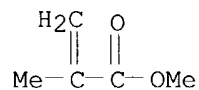
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CRN 868-77-9
CMF C6 H10 O3



CM 4

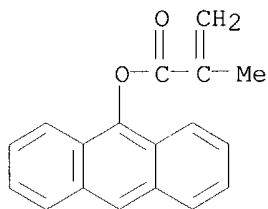
CRN 80-62-6
CMF C5 H8 O2



RN 410536-28-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 9-anthracenyl 2-methyl-2-propenoate, ethenyltrimethoxysilane and α-(1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

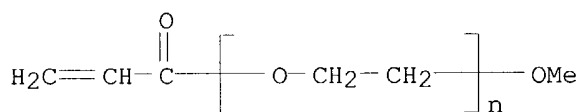
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CRN 32468-70-5
CMF C18 H14 O2



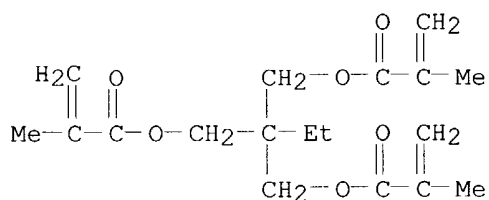
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CRN 32171-39-4
CMF (C2 H4 O)_n C4 H6 O2
CCI PMS



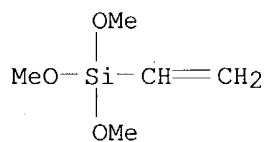
CM 3

CRN 3290-92-4
CMF C18 H26 O6



CM 4

CRN 2768-02-7
CMF C5 H12 O3 Si



L42 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:241110 HCAPLUS
 DN 136:270593
 TI Antireflective composition for forming relief images
 IN Zampini, Anthony; Docanto, Manuel; Gore, Robert H.
 PA Shipley Company, L.L.C., USA
 SO PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002025374	A2	20020328	WO 2001-US29243	20010919
	WO 2002025374	A3	20020711		
	W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	AU 2001092783	A5	20020402	AU 2001-92783	20010919
	US 2002076642	A1	20020620	US 2001-956531	20010919
	US 6503689	B2	20030107		
	EP 1319197	A2	20030618	EP 2001-973177	20010919
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR		
	JP 2004511006	T2	20040408	JP 2002-529313	20010919
PRAI	US 2000-233517P	P	20000919		
	WO 2001-US29243	W	20010919		
AB	Disclosed are new antireflective comps. including cross-linked polymeric particles including one or more chromophores. Also discloses are methods of forming relief images using these antireflective comps.				
IC	ICM G03F007-00				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 35, 38, 42				
ST	photoresist antireflective compn coating crosslinked polymer				
IT	Antireflective films Coating materials Photoresists (antireflective composition for forming relief images)				
IT	195215-61-3, UV6 RL: TEM (Technical or engineered material use); USES (Uses) (forming relief images using antireflective composition coated on)				
IT	17464-88-9DP, Powderlink 1174, polymer with Anthracenyl methacrylate-hydroxyethyl methacrylate-Me methacrylate-trimethylolpropane trimethacrylate copolymer 405296-71-1DP , polymer with Powderlink 1174 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (methods of forming relief images using antireflective composition containing)				
IT	405296-71-1DP , polymer with Powderlink 1174 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				

(methods of forming relief images using antireflective composition containing)

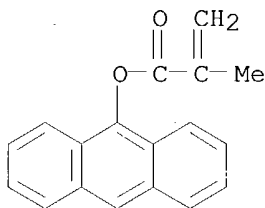
RN 405296-71-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 9-anthracenyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 32468-70-5

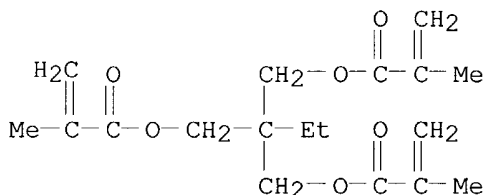
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CM 2

CRN 3290-92-4

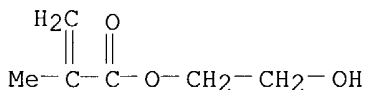
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CM 3

CRN 868-77-9

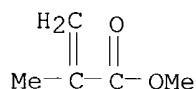
CMF C6 H10 O3



CM 4

CRN 80-62-6

CMF C5 H8 O2



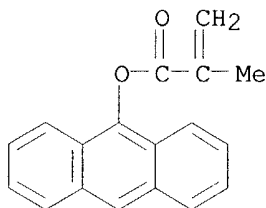
L42 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:645755 HCAPLUS
 DN 133:245105
 TI Planarizing antireflective **coating** compositions
 IN Pavelchek, Edward K.; Adams, Timothy G.; Docanto, Manuel; Coley, Suzanne;
 Barclay, George G.
 PA Shipley Company LLC, USA
 SO Eur. Pat. Appl., 15 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1035442	A2	20000913	EP 2000-301634	20000229
	EP 1035442	A3	20010502		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6316165	B1	20011113	US 1999-264061	19990308
	JP 2000294504	A2	20001020	JP 2000-63610	20000308
	US 2002022196	A1	20020221	US 2001-952880	20010915
PRAI	US 1999-264061	A	19990308		
AB	<p>The invention relates to compns. that reduce reflection of exposing radiation from a substrate back into an overcoated photoresist layer and to antireflective coatings that are planarizing with respect to a substrate. The present invention provides new light absorbing compns. suitable for use as antireflective coating compns. (ARC), including for deep UV applications. The antireflective compns. of the invention are particularly useful where a planarizing coating layer is required. ARCs of the invention contain a low mol. weight resin, a plasticizer compound and/or a low TG resin. The invention also includes methods for applying forming planarizing ARC coating layers.</p>				
IC	ICM G03F007-09				
CC	74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
ST	planarizing antireflective coating resin plasticizer deep UV				
IT	UV radiation				
	(deep; planarizing antireflective coating compns. containing low mol. weight resin and plasticizer)				
IT	Antireflective films				
	Photoresists				
	Plasticizers				
	(planarizing antireflective coating compns. containing low mol. weight resin and plasticizer)				
IT	194861-06-8, Di-tert-butyl diphenyliodonium 10-camphorsulfonate				
	RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)				
	(photoacid generator; synthesis of polymer for planarizing antireflective coating compns.)				
IT	11114-17-3, FC-430				
	RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)				
	(planarizing antireflective coating composition containing surface				

- leveling agent)
- IT 142901-67-5, Nacure X 49-110
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
(planarizing antireflective **coating** composition containing thermal acid generator)
- IT 93933-64-3, 2,6-Bis(2',4'-dihydroxybenzyl)-4-methylphenol
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
(plasticizer; preparation and processing of planarizing antireflective **coating** composition containing plasticizer)
- IT 195215-60-2, UV 5
RL: DEV (Device component use); NUU (Other use, unclassified); USES (Uses)
(pos. photoresist for overcoating of planarizing antireflective **coating** composition)
- IT 292842-22-9P, 9-Anthracenylmethacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 292842-23-0P
RL: IMF (Industrial manufacture); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis of polymer for planarizing antireflective **coating** compns.)
- IT 17464-88-9, Powderlink 1174
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
(synthesis of polymer for planarizing antireflective **coating** compns.)
- IT 7440-21-3, Silicon, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(wafer substrate for spin-**coating** of planarizing antireflective **coating** composition for thermal curing)
- IT 292842-22-9P, 9-Anthracenylmethacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 292842-23-0P
RL: IMF (Industrial manufacture); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis of polymer for planarizing antireflective **coating** compns.)
- RN 292842-22-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 9-anthracenyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

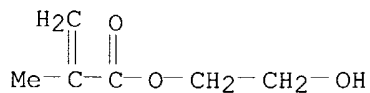
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CRN 32468-70-5
CMF C18 H14 O2



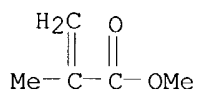
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CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2

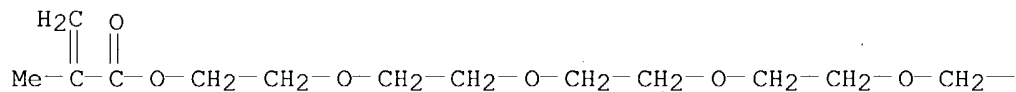


RN 292842-23-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 9-anthracenyl ester, polymer with
14-hydroxy-3,6,9,12-tetraoxatetradec-1-yl 2-methyl-2-propenoate and methyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 67993-08-2
CMF C14 H26 O7

PAGE 1-A

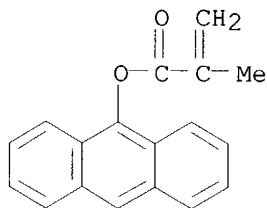


PAGE 1-B

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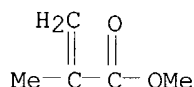
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CMF C18 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



L42 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1985:140939 HCAPLUS

DN 102:140939

TI Photosensitive material for recording holograms

PA Fujitsu Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59201051	A2	19841114	JP 1983-76552	19830430
PRAI	JP 1983-76552		19830430		

AB A material for recording holograms is composed mainly of N-vinylcarbazole-(9-(p-vinylphenyl)anthracene) copolymer. The copolymer may be crosslinked using cyclic cis- α -dicarbonyl compds., and, in this case, may contain a sensitizer having an absorption maximum at longer wavelength than that of the above crosslinking agent. Acridine Orange, thioflavin, or Michler's ketone may be selected as the sensitizer. The material has high sensitivity to longer wavelength light, is chemical stable, and provides high resolution and has resistivity to humidity, heat and light exposure. Thus, a copolymer was prepared by polymerizing N-vinylcarbazole 5

and

9-(p-vinylphenyl)anthracene 5 g with the addition of azobisisobutyronitrile, in benzene. Photosensitive composition containing the above polymer 1, 2,3-bornanedione 0.1, Michler's ketone 0.1, and PhCl 30 g, was coated on a glass plate to form a 3 μ m layer, exposed to form a hologram, developed in PhMe-xylene 1:1 mixture immersed in n-pentane, and dried. Laser used in hologram was He-Cd (325 nm). A hologram having diffraction efficiency 55% was obtained, which was not affected by exposure to Ar laser light (28 W/cm²). The efficiency decrease after exposure to 100° water vapor for 4 h was .apprx.15%.

IC G03C001-71

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

IT 35705-76-1

RL: USES (Uses)

(hologram formation by layer containing)

IT 35705-76-1

RL: USES (Uses)

(hologram formation by layer containing)

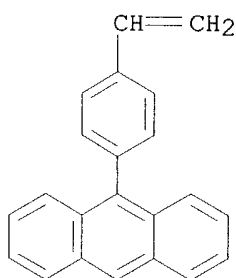
RN 35705-76-1 HCAPLUS

CN 9H-Carbazole, 9-ethenyl-, polymer with 9-(4-ethenylphenyl)anthracene (9CI)
(CA INDEX NAME)

CM 1

CRN 35244-03-2

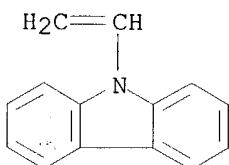
CMF C22 H16



CM 2

CRN 1484-13-5

CMF C14 H11 N



L42 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:94483 HCAPLUS

DN 100:94483

TI Electrophotographic plate having sensitivity at long wavelength region

PA Hitachi, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 57178245	A2	19821102	JP 1981-63293	19810428
PRAI	JP 1981-63293		19810428		

AB A composite electrophotog. plate has (1) a charge-generating layer with optical absorption maximum at ≥ 750 nm and (2) a charge-transfer layer containing an organic compound with electron affinity ≥ 2.2 eV and an electron donor type polymer. Thus, an Al support was **coated** with Cu phthalocyanine and then **coated** with a composition containing poly[9-(4-vinylphenyl)anthracene] and 2,6-dichloro-p-benzoquinone-4-chloroimide (electron affinity = 2.2 eV) to give an electrophotog. plate having good sensitivity toward semiconductor laser radiation.

IC G03G005-04; G03G005-06

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other **Reprographic** Processes)

IT 84-58-2 101-38-2 1172-02-7 25067-59-8 **35239-23-7**
82226-99-1

RL: USES (Uses)

(electrophotog. charge-transfer layer containing, for semiconductor laser-sensitive electrophotog. plates)

IT **35239-23-7 82226-99-1**

RL: USES (Uses)

(electrophotog. charge-transfer layer containing, for semiconductor laser-sensitive electrophotog. plates)

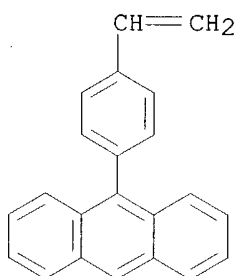
RN 35239-23-7 HCAPLUS

CN Anthracene, 9-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

CMF C22 H16



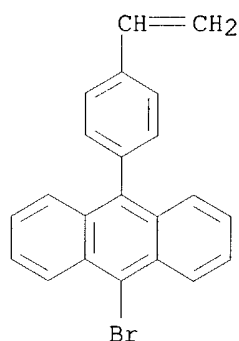
RN 82226-99-1 HCAPLUS

CN Anthracene, 9-bromo-10-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 82226-98-0

CMF C22 H15 Br



L42 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:43019 HCAPLUS

DN 100:43019

TI Composite electrophotographic plate

PA Hitachi, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

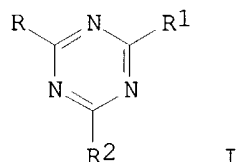
DT Patent

LA Japanese .

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57167031	A2	19821014	JP 1981-51835	19810408
	JP 63055058	B4	19881101		
PRAI	JP 1981-51835		19810408		

GI



I

AB Composite electrophotog. plates contain a binder resin composition containing a crosslinked copolymer which was obtained by reaction of I (R, R1 = H, alkyl, Ph, OH, NH2 alkylamino, hydroxymethylamino, alkoxyethylamino; R2 = hydroxymethylamino, alkoxyethylamino) and a copolymer of 9-(p-vinylphenyl)anthracene or 10-bromo-9-(p-vinylphenyl)anthracene with ≥ 1 monomer of the formula $\text{CH}_2\text{:CR}_3\text{COR}_4$ ($\text{R}_3 = \text{H, Me}$; $\text{R}_4 = \text{NHCH}_2\text{OR}_5$, OR_6 ; $\text{R}_5 = \text{H, C1-4 alkyl}$; $\text{R}_6 = \text{H, C1-4 alkyl, 2-ethylhexyl, 2-hydroxyethyl, 2-hydroxypropyl, glycidyl}$). Thus, an Al support was **coated** with a composition containing ϵ -type Cu phthalocyanine and a polycarbonate resin (Iupilon S3000), and **coated** with a composition containing iso-Bu methacrylate-9-(4-vinylphenyl)anthracene copolymer, trimethylolmelamine, and o-bromoanil to give a composite electrophotog. plate having good sensitivity and durability.

IC G03G005-07

ICA C08F212-06

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

IT 62042-85-7 62042-87-9 62042-88-0
62042-90-4 64112-71-6 88361-13-1
88361-14-2 88361-15-3

RL: USES (Uses)

(electrophotog. photoreceptor with charge-transfer layer containing binder of)

IT 62042-85-7 62042-87-9 62042-88-0
62042-90-4 64112-71-6 88361-13-1
88361-14-2 88361-15-3

RL: USES (Uses)

(electrophotog. photoreceptor with charge-transfer layer containing binder of)

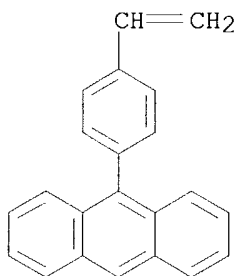
RN 62042-85-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with
9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

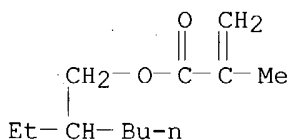
CMF C22 H16



CM 2

CRN 688-84-6

CMF C12 H22 O2



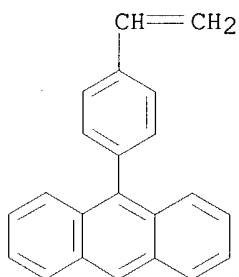
RN 62042-87-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-butoxyethyl ester, polymer with
9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

CM 1

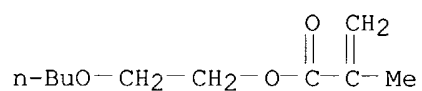
CRN 35244-03-2

CMF C22 H16



CM 2

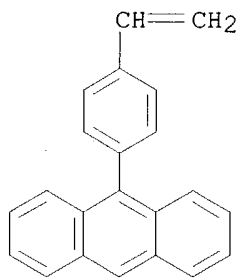
CRN 13532-94-0
CMF C10 H18 O3



RN 62042-88-0 HCAPLUS
CN 2-Propenoic acid, polymer with 9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

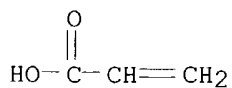
CM 1

CRN 35244-03-2
CMF C22 H16



CM 2

CRN 79-10-7
CMF C3 H4 O2



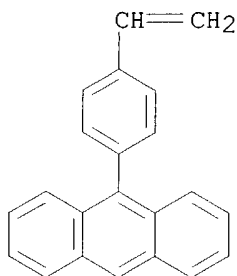
RN 62042-90-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with
9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

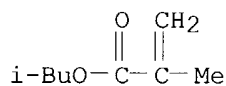
CMF C22 H16



CM 2

CRN 97-86-9

CMF C8 H14 O2



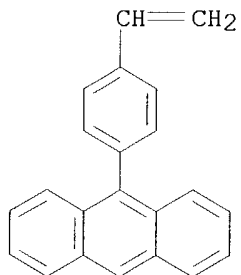
RN 64112-71-6 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 9-(4-ethenylphenyl)anthracene
(9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

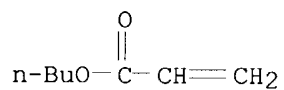
CMF C22 H16



CM 2

CRN 141-32-2

CMF C7 H12 O2



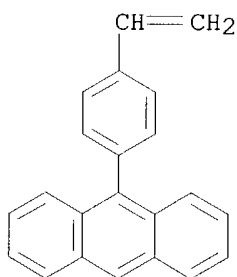
RN 88361-13-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hydroxybutyl ester, polymer with
9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

CMF C22 H16

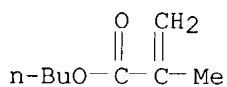


CM 2

CRN 29721-79-7

CMF C8 H14 O3

CCI IDS



D1-OH

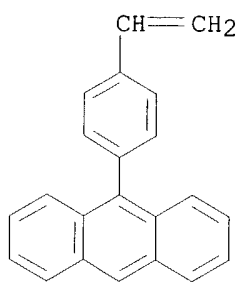
RN 88361-14-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

CM 1

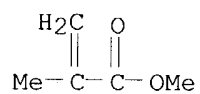
CRN 35244-03-2

CMF C22 H16



CM 2

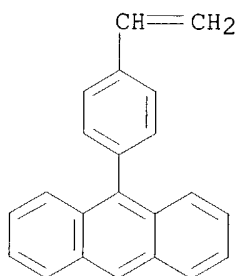
CRN 80-62-6
CMF C5 H8 O2



RN 88361-15-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

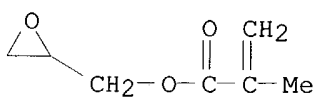
CM 1

CRN 35244-03-2
CMF C22 H16



CM 2

CRN 106-91-2
CMF C7 H10 O3



L42 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1983:446014 HCAPLUS
 DN 99:46014
 TI Composite electrophotographic plates
 PA Hitachi, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57118249	A2	19820723	JP 1981-3163	19810114
PRAI	JP 1981-3163		19810114		

AB Charge generating layers for composite electrophotog. plates are prepared by using 9-(4-vinylphenyl)anthracene (co)polymers or their bromination products as the binder resin. Thus, an Al support was **coated** with a composition containing poly[9-(4-vinylphenyl)anthracene] (I), Cu phthalocyanine, and 2,4,7-trinitrofluorenone (II), and subsequently **coated** with a composition containing I, II, and Vylon 200 to give a high-sensitivity composite electrophotog. plate.

IC G03G005-04; G03G005-05; G03G005-07

ICA C08F012-32

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other **Reprographic** Processes)

IT 88-88-0 118-96-7 129-79-3 147-14-8 3096-52-4 25067-59-8

31391-38-5 **35239-23-7 35239-23-7D**, fluorinated

35705-76-1 50764-83-5 65727-10-8 70936-94-6

RL: USES (Uses)

(composite electrophotog. plates containing)

IT **35239-23-7 35239-23-7D**, fluorinated **35705-76-1**

RL: USES (Uses)

(composite electrophotog. plates containing)

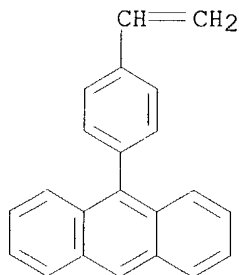
RN 35239-23-7 HCAPLUS

CN Anthracene, 9-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

CMF C22 H16

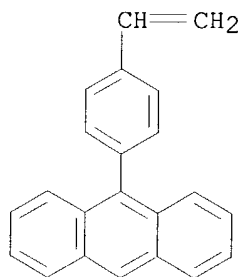


RN 35239-23-7 HCAPLUS

CN Anthracene, 9-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

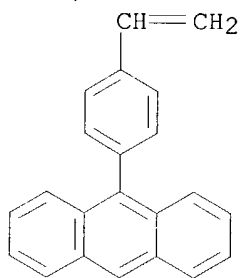
CRN 35244-03-2
CMF C22 H16



RN 35705-76-1 HCAPLUS
CN 9H-Carbazole, 9-ethenyl-, polymer with 9-(4-ethenylphenyl)anthracene (9CI)
(CA INDEX NAME)

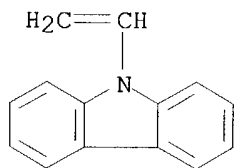
CM 1

CRN 35244-03-2
CMF C22 H16



CM 2

CRN 1484-13-5
CMF C14 H11 N



L42 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:25479 HCAPLUS
DN 98:25479
TI Composite electrophotographic plates and processes

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

PA Hitachi, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57052059	A2	19820327	JP 1980-125930	19800912
PRAI	JP 1980-125930		19800912		

AB. An electrophotog. process is described in which an electrophotog. plate having a phthalocyanine pigment type charge-generating layer and an electron donor-acceptor mixture type charge-transfer layer is pos. charged during latent image formation and the charge removal step is carried out by neg. charging and exposure to visible light (≤ 800 nm). Thus, an Al support was **coated** with a composition containing Cu phthalocyanine and a polycarbonate resin, and then **coated** with a composition containing poly(N-vinylcarbazole) and 2,4,7-trinitrofluorenone to give a composite electrophotog. plate useful for the above electrophotog. process.

IC G03G013-00; G03G005-06; G03G015-00

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other **Reprographic** Processes)

IT 129-79-3 746-53-2 25067-59-8 **35239-23-7 84073-20-1**
 RL: USES (Uses)
 (electrophotog. composite plate with charge-transport layer containing)

IT **35239-23-7 84073-20-1**
 RL: USES (Uses)
 (electrophotog. composite plate with charge-transport layer containing)

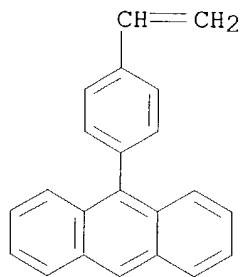
RN 35239-23-7 HCAPLUS

CN Anthracene, 9-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

CMF C22 H16



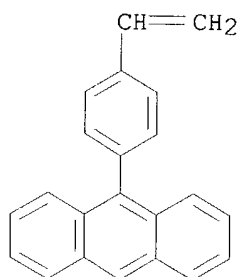
RN 84073-20-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, undecyl ester, polymer with 9-(4-ethenylphenyl)anthracene (9CI) (CA INDEX NAME)

CM 1

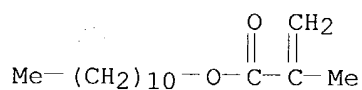
CRN 35244-03-2

CMF C22 H16



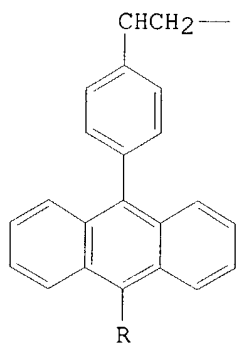
CM 2

CRN 16493-35-9
CMF C15 H28 O2

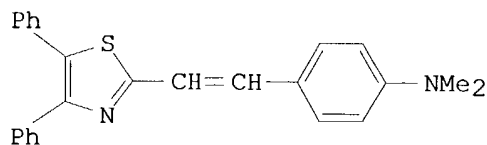


L42 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:431237 HCAPLUS
DN 97:31237
TI Composite electrophotographic plates
PA Hitachi, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 56155950	A2	19811202	JP 1980-59478	19800507
	JP 63020344	B4	19880427		
PRAI	JP 1980-59478		19800507		
GI					



I



II

AB An electrophotog. plate is composed of (1) a support, (2) an amorphous Si type charge-generating layer, and (3) a charge-transfer layer containing ≥ 1 compound selected from polymers having structural units of formula I (R = H, Br), triphenyloxazole derivs., and styryl dye bases. Thus, a conductive support was **coated** with an amorphous Si layer (doped with P, H) and with a composition containing II and Vylon 200 to give a composite

electrophotog. plate having excellent sensitivity.

IC G03G005-08

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other **Reprographic** Processes)

IT 10004-31-6 10004-39-4 10004-88-3 **35239-23-7** 36772-53-9
40442-45-3 69642-54-2 69642-56-4 72924-69-7 72924-70-0
78078-59-8 82223-20-9 82223-21-0 82223-22-1 82223-23-2
82226-99-1

RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. charge-transfer agent)

IT **35239-23-7 82226-99-1**

RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. charge-transfer agent)

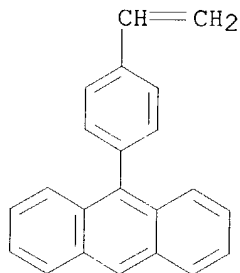
RN 35239-23-7 HCAPLUS

CN Anthracene, 9-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 35244-03-2

CMF C22 H16



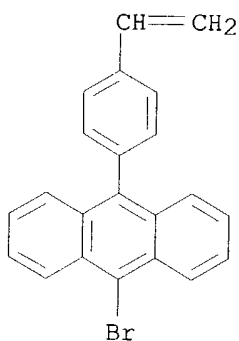
RN 82226-99-1 HCAPLUS

CN Anthracene, 9-bromo-10-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

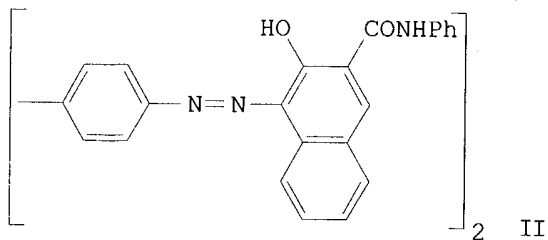
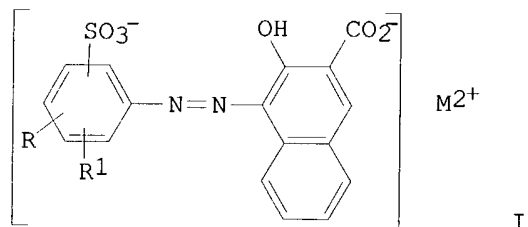
CRN 82226-98-0

CMF C22 H15 Br



L42 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1982:133147 HCAPLUS
 DN 96:133147
 TI Composite electrophotographic plates
 PA Hitachi, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 56114952	A2	19810909	JP 1980-17836	19800218
	JP 62055653	B4	19871120		
PRAI	JP 1980-17836		19800218		
GI					



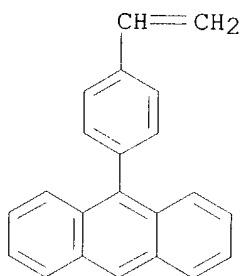
AB An electrophotog. composite plate contains (1) a charge-generating Cu phthalocyanine pigment and (2) a charge-transfer agent composed of ≥ 1 nitrofluorenones (1-3 NO₂ groups/mol.) and ≥ 1 polymer selected from 9-(4-vinylphenyl)anthracene homopolymers, copolymers, and

their bromination products. Monoazo lake pigments of the general formula I ($M^{2+} = Ca^{2+}, Ba^{2+}, Mg^{2+}$; R, R1 = H, Me, OMe) or bisazo pigments of the formula II ($R_2 = OMe, Cl$) may be used together with the Cu phthalocyanine. Thus, Cu phthalocyanine, II ($R_2 = OMe$), and poly(vinyl butyral) were mixed well in xylene, and the mixture was **coated** on an Al support to give a charge-generating layer. Subsequently, a composition containing poly[9-(4-vinylphenyl)anthracene] and 2,4-dinitrofluorenone was **coated** on the charge-generating layer to give an electrophotographic plate having excellent sensitivity.

IC G03G005-04; G03G005-06; G03G005-09; H01L031-08
ICA C09K003-16
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 129-79-3 147-14-8 5281-04-9 10127-03-4 **35239-23-7**
35239-23-7D, brominated **35705-76-1** 41709-76-6
RL: USES (Uses)
(electrophotog. composite plates containing)
IT **35239-23-7 35239-23-7D**, brominated **35705-76-1**
RL: USES (Uses)
(electrophotog. composite plates containing)
RN 35239-23-7 HCAPLUS
CN Anthracene, 9-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

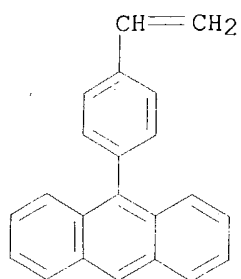
CRN 35244-03-2
CMF C22 H16



RN 35239-23-7 HCAPLUS
CN Anthracene, 9-(4-ethenylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

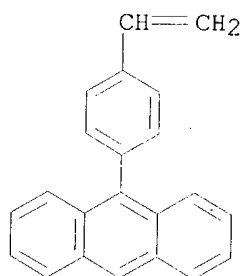
CRN 35244-03-2
CMF C22 H16



RN 35705-76-1 HCAPLUS
CN 9H-Carbazole, 9-ethenyl-, polymer with 9-(4-ethenylphenyl)anthracene (9CI)
(CA INDEX NAME)

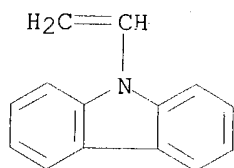
CM 1

CRN 35244-03-2
CMF C22 H16



CM 2

CRN 1484-13-5
CMF C14 H11 N



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